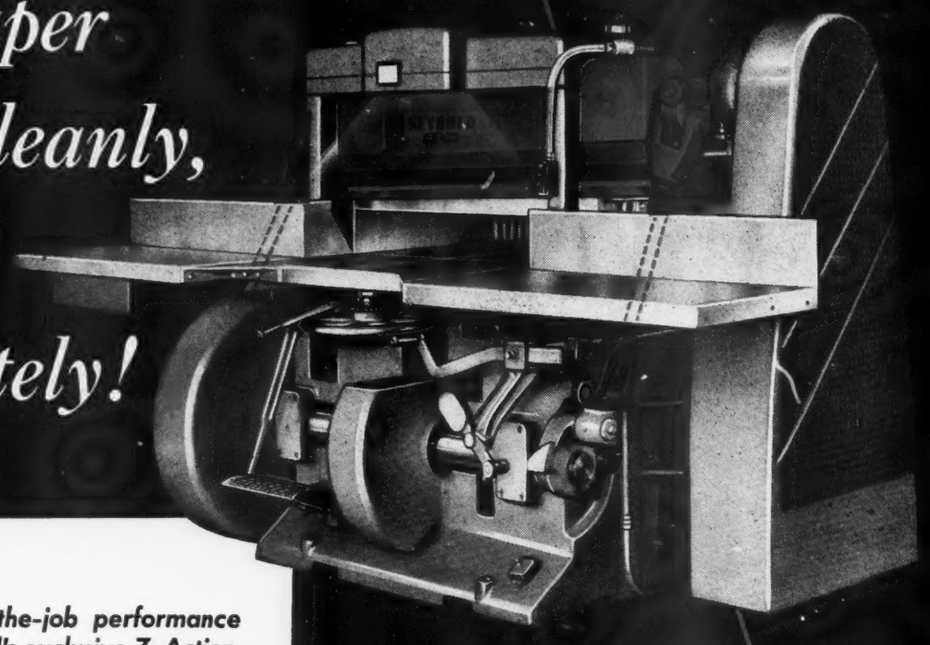
JULY 1949

PRINTING EQUIPMENT *Engineer*

THE SEYBOLD HEAVY DUTY 40"

cuts paper more cleanly, more accurately!



Three years of on-the-job performance have proved Seybold's exclusive Z-Action. Z-Action was introduced in 1946 on the now-famous, Seybold "Sixty" paper cutters.

What is Z-Action?

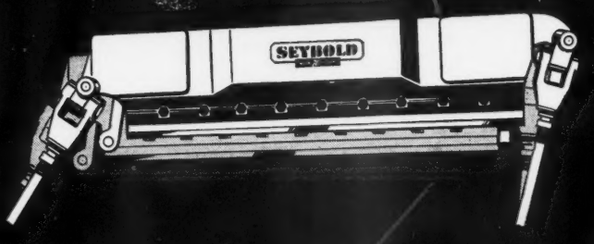
Z-Action is the scientific cutting action that makes a Seybold cut more accurately and cost less to operate.

First of all, the double-shearing motion of Z-Action eases the knife into the pile with minimum shock. That's easier on the pile . . . easier on the machine.

Z-Action takes the knife through the pile at the *correct* angle . . . all the way. That reduces knife wear . . . reduces machine wear.

Z-Action operates with two, sturdy pull bars to draw the knife through the toughest piles without chatter . . . without uncut sheets at the bottom of the pile.

All this adds up to accurate, low-cost cutting. Seybold and only Seybold gives you Z-Action. Why not contact your nearest Seybold office for a demonstration?



because it has

Z-ACTION

HARRIS-SEYBOLD

General Offices—Cleveland 5, Ohio

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Be sure it has an enviable and well-earned reputation established over a period of many years for trouble-free performance in large and small newspaper plants and in engraving, electrotype, commercial printing and magazine production.

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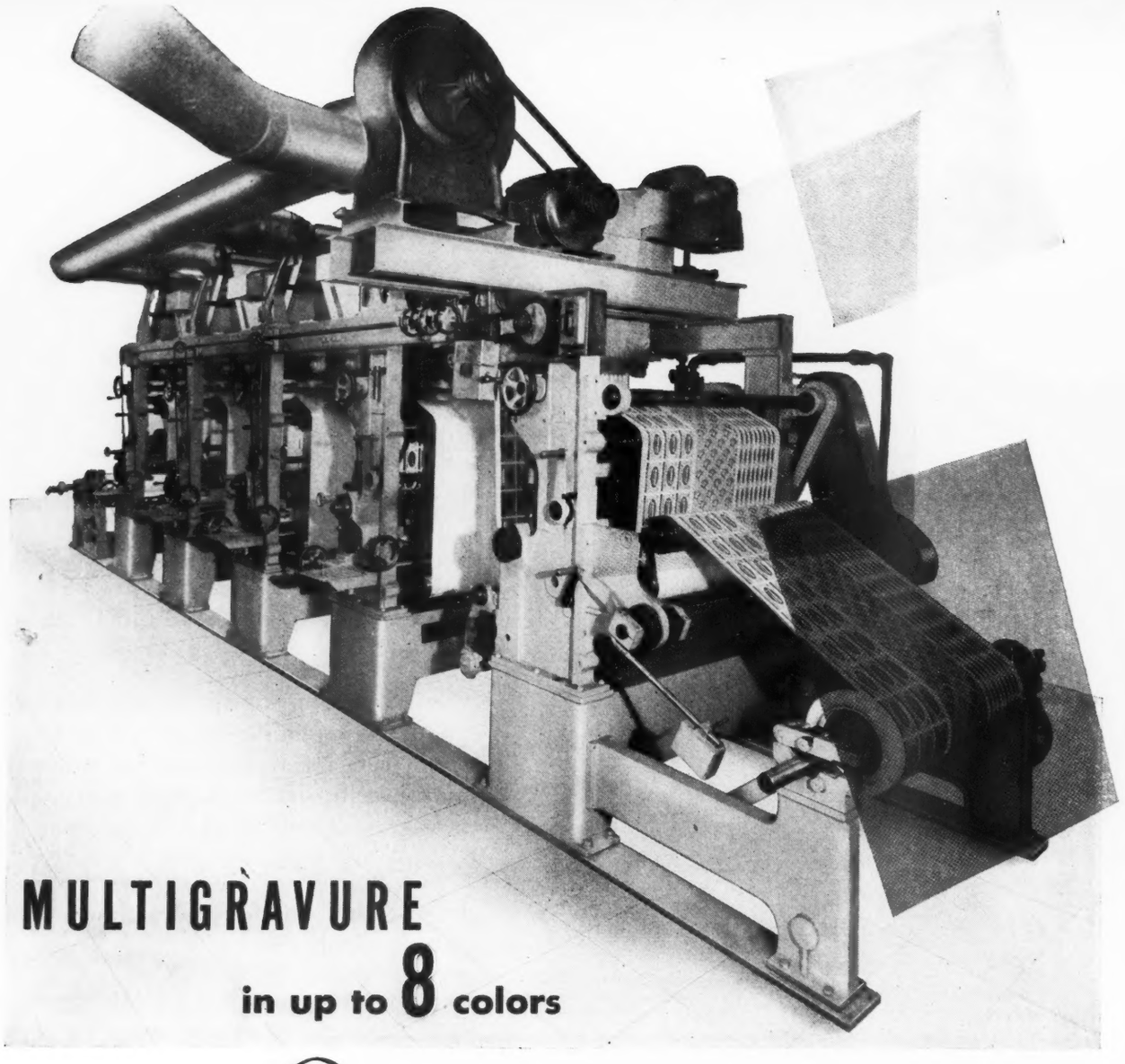

ATF KLINGROSE famous PA presses

PRESS illustrated here will print four colors one side, two each side or three colors one side and one on the other, but can be obtained for printing up to eight colors. Runs glassine, cellophane, film, laminated foils and a wide range of papers in web widths of 32″ and 42″. Operating speeds up to 450 feet per minute. Includes pull roll with slitters and center shaft or surface rewind. Rotary sheeter with jogger pile delivery, or a newspaper or magazine folder can be added to deliver folded signatures.

ATF-Klingrose offers the most complete line of gravure presses for every commercial need, embodying many exclusive features to increase efficiency, speed, economy, accuracy and accessibility. Ask any owner of an ATF-Klingrose press to tell you its performance record. For complete information, write to

Write on your company letterhead for free copy of

ATF CYLINDER CALCULATOR

A convenient pocket-size booklet giving accurate diameters for any circumference from 1″ to 60⅞″.

American Type Founders

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MACHINES DO BETTER
WITH BETTER METAL

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METALS REFINING COMPANY

DIV. OF THE GLIDDEN CO. HAMMOND, INDIANA

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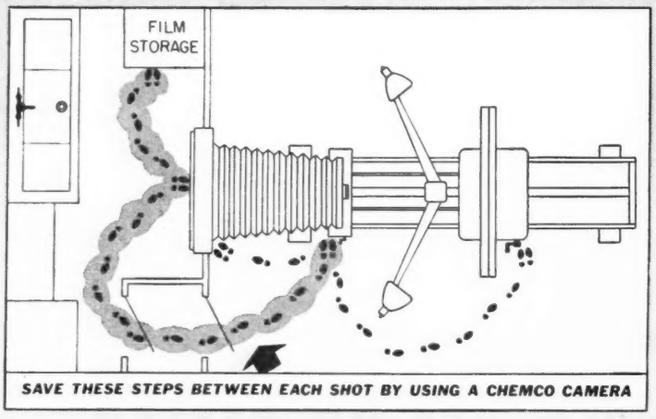

SAVE THESE STEPS BETWEEN EACH SHOT BY USING A CHEMCO CAMERA

SAVE TIME . . .
SAVE EFFORT . . .

USE CHEMCO CAMERAS FOR PRECISION NEGATIVE WORK

Why overburden available manpower with unnecessary physical effort? With a Chemco camera the operator works between copy board, lens board and near-by controls until a series of shots are completed. He enters the darkroom only when one or more exposures are made since each negative has been deposited in a light tight box, easily accessible from the darkroom. When desired, a second man may be handling the darkroom work at the same time that the operator is making additional shots . . . the darkroom side of all Chemco cameras is light tight so that even with a strong light in the darkroom, shooting is not delayed. With a Chemco, the operator saves an average of 30 steps per exposure . . . he is not required to enter the darkroom to load and unload film from the camera.

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PRINTING EQUIPMENT *Engineer*

A TECHNICAL MAGAZINE

JULY
1949

Volume 78 **Number 4**

Published especially for management, production and mechanical executives responsible for printing production and the specification of equipment and supplies used in the commercial, magazine, private plant and daily newspaper fields.

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How to Prepare ART and COPY for Offset Lithography

by William J. Stevens and John A. McKinven

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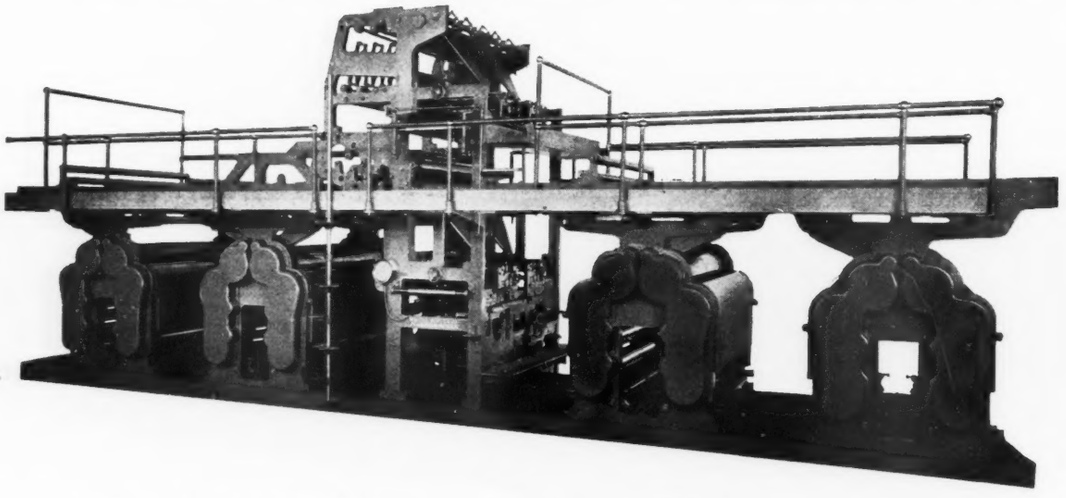

- The Scott is the ONLY newspaper press embodying important and modern engineering principles.
- Light weight, but extremely strong, hardened alloy steel spiral miter gears mounted truly concentric on splined high speed driving shafts carried in precision ball bearings, deliver a smooth and quiet flow of power to the press.
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PLAINFIELD, N. J.

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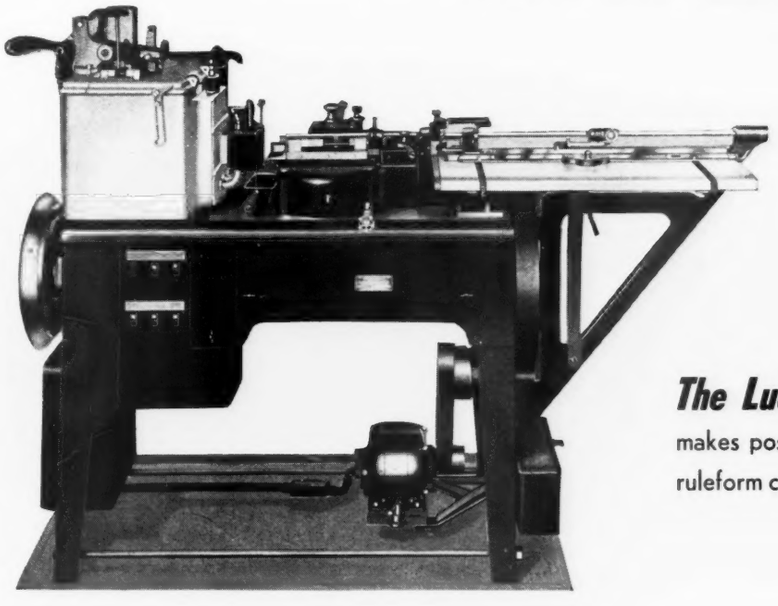
The plant which installs an Elrod eliminates such difficulties, and is sure of a continuous supply of high-quality strip material in a size range from 1-point to 36-points in thickness, sufficient for all composing room needs.

Simple in design and mechanism, the Elrod turns out a product which meets severe modern printing requirements. This material comes from the mold as a continuous strip of metal, cooled and solidified under pressure.

The Elrod has proved itself essential through many years of dependable and efficient service, to complete user satisfaction. Ask us for more details.



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makes possible better production of job, display and ruleform composition with distinctive Ludlow typefaces

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Colortrol is just one of the many outstanding features of the Goss Headliner that combine to provide ease of operation, maximum flexibility of color production, top quality printing, greater safety, and more efficient operation at high speeds. That's why the Goss Headliner gets an enthusiastic O.K. from men who know presses . . . who are responsible for operation and maintenance.

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PRESTON, ENGLAND

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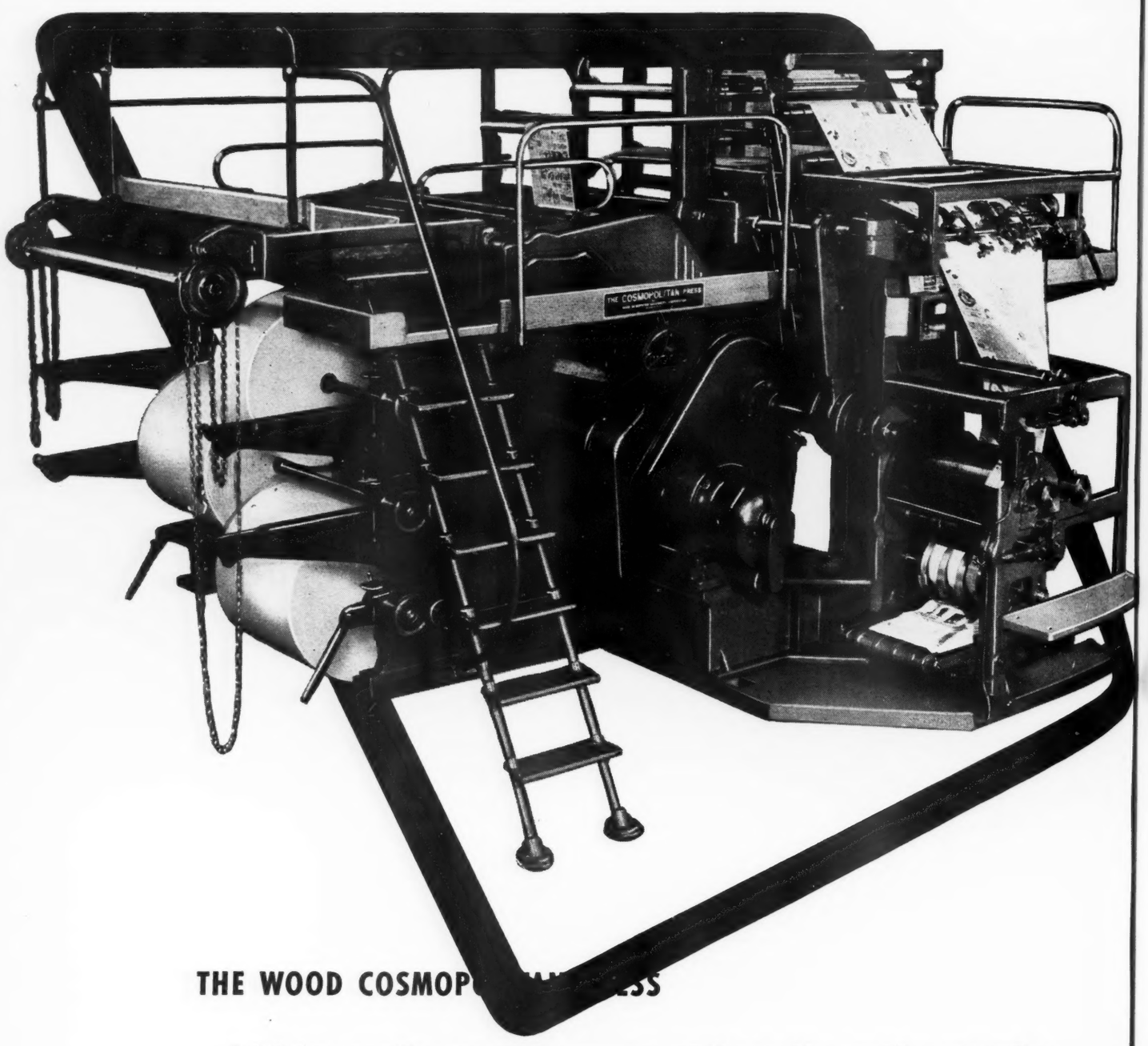


THE WOOD COSMOP ESS

A full-size, versatile, economical newspaper printing machine providing outstanding production advantages to publishers of small and medium size newspapers.

The COSMOPOLITAN Press is a complete printing machine. It is built on a bedplate so that it may be installed on any flat, solid floor. Its single folder cuts and delivers standard size newspapers folded to half page size, and tabloid papers folded to full page size. The press, illustrated above, will deliver standard size newspapers up to 24 pages or tabloid size newspapers up to 48 pages, counted in lots of 25 or more.

IF IT'S Wood IT'S GOOD

WOOD NEWSPAPER MACHINERY CORPORATION

PLAINFIELD, NEW JERSEY • SALES OFFICE: 501 FIFTH AVENUE, NEW YORK 17

W COSMOPOLITAN PRESS

ori*he smaller-city newspaper!*

A MESSAGE TO ALL PUBLISHERS OF SMALLER-CITY NEWSPAPERS:

WOOD NEWSPAPER MACHINERY CORPORATION

501 FIFTH AVENUE

NEW YORK 17, N.Y.

OSCAR C. ROSS
PRESIDENT

Gentlemen:

WOOD NEWSPAPER MACHINERY CORPORATION is sincerely proud to present The COSMOPOLITAN Press, because it marks the opening of new doors of opportunity for the smaller-city newspaper. To you who are familiar with printing equipment, even a casual study or inspection of The COSMOPOLITAN Press will reveal the careful thought, the painstaking research, and the ingenious engineering which have successfully combined to produce this press.

The COSMOPOLITAN Press is built in true WOOD traditions of accuracy, sturdiness, beauty and dependability. In order that small and medium-size users may enjoy advantages heretofore available only to large metropolitan newspapers, this press was designed with economy of manufacture in mind. Equally important are the many production flexibilities and economical practices inherent in the press.

The use of standard size, semi-cylindrical stereotype plates . . . the ability to produce a variety of pages and sections . . . the control of production to circulation requirements . . . the provision for circulation growth and for a wide latitude in number of pages . . . the use of color in regular editions when desired . . . these are a few of the many advantages The COSMOPOLITAN Press offers the smaller-city newspaper.

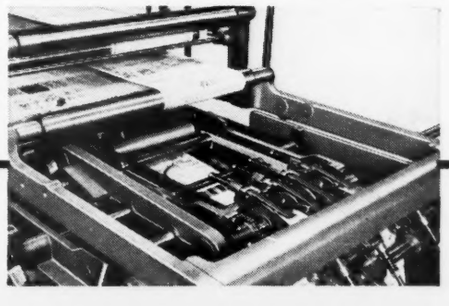
Flat-bed users contemplating rotary equipment and rotary press users thinking of new machinery are invited to write for complete information.

Sincerely,

Oscar C. Ross

The INTRASERTOR

. . . an integral part of The COSMOPOLITAN Press. The INTRASERTOR is a new and important development which "intraserts" a 2-page sheet in one section of a two-part newspaper when desired. This permits increasing a regular size newspaper by 2 pages and a tabloid size paper by 4 pages, even when running "collect". "Collect" products may now be obtained with one section carrying 2 pages more than the other section.



THE COSMOPOLITAN PRESS PROVIDES FOR

COLOR!

***One color and black* on 8 pages of a 16-page newspaper!**
***Two colors and black* on 4 pages of a 16-page newspaper!**
***Three colors and black* on 4 pages of an 8-page newspaper!**

You may not plan for or want to use color now . . .
but when you do, you've got it . . . in

The COSMOPOLITAN Press!

Heart to Heart

My dear Friends:

The Printing Industries of Philadelphia, Inc., Bulletin #47, May 25th, 1949, says that "no general wage cuts will take place, and industry, in order to maintain volume on a declining market, will have to achieve some price reductions out of management-effected savings and increased productivity".

Really, that spells the many-purpose, may Profit BAUMFOLDER-true?

We did not, after V-E Day, embrace the opportunity of taking a big profit when there was such a demand for folders, but kept our prices practically pre-war (some models slightly less . . . some models slightly more). Other printing machines that may have been repriced close to double prewar can more readily absorb a modest cut today, but we are the unfortunate "unsung hero" who has already given thousands of firms the benefit of rock-bottom prices.

One week last month, fifty-five firms from the Atlantic to the Pacific ordered their Miracle Money-Maker BAUMFOLDER-the indispensable solver of today's price competition. Everywhere Printers and Bookbinders find it "indispensable." It invariably returns its cost many times over . . . long before you pay for it (on payment-out-of-earnings plan where you make but a small initial deposit) if used but a few hours a week. Honestly now, under these conditions, doesn't it cost you less than nothing to own it? And aren't you losing a small fortune by trying to compete without it?

Why are BAUMFOLDERS THE FASTEST SELLING FOLDERS IN AMERICA? Among the many reasons it is first in sales is because it is first in value (priced close to pre-war—so much less than the usual price of fine folders) and first in accuracy (perfection, no less) and first in versatility (no stock too thin nor too heavy and it folds, pastes, trims and folds again for mailing in one operation. It will perforate both directions at the same time and deliver sheets flat) and first in production (the fastest Folders ever built—feeds and folds faster than paper can stand—broken through the ceiling—the ultimate in production; therefore, the ultimate profit, making folding your most profitable operation) and first in sturdiness (precision-built of finest materials obtainable—the heaviest built, the strongest built Folders ever designed—truly life-time Folders) and first in quick-setting and ease of operation (timeless—almost self-operating . . . thousands, since V-E Day, have been uncrated and set up by users who had no previous operating experience).

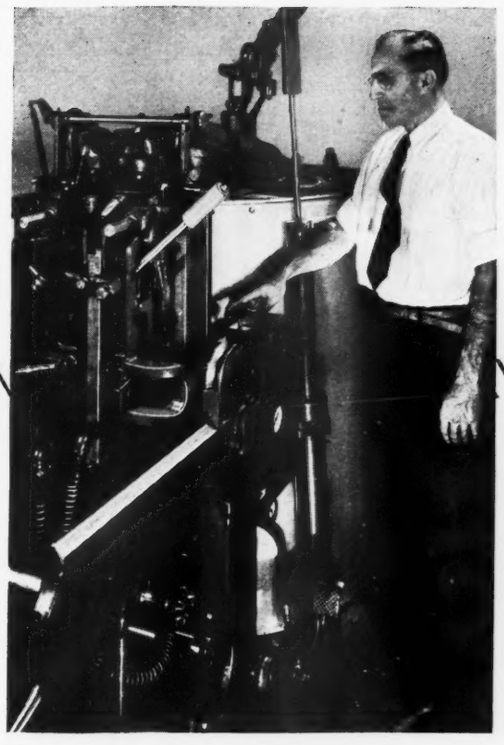
Why do without it and lose—why not phone us collect or wire us to ship it and make it your "Gold-Mine for Forty-Nine"?

RUSSELL ERNEST BAUM INC.
615 Chestnut St.
Phila. 6, Pa.

Sizes
22 x 28 **14 x 20** **25 x 38** **17½ x 22½** **28 x 44**

P.S. June orders breaking all sales records. Factory working overtime (although every hour a "Baum" rolls off the assembly line) over fifty hours weekly. Don't delay . . . and be disappointed in delivery. Phone me personally collect—let's talk it over.

add SAFETY and SPEED



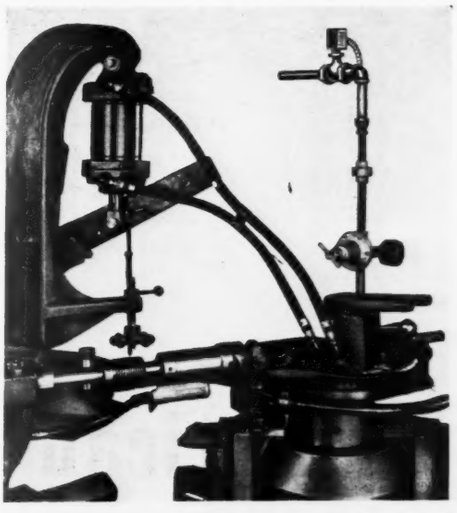
to your stereotype production

The new **WOOD** Pony Power Pump pours molten metal rapidly, accurately and safely! At the touch of a finger, the casting box of your Pony Autoplate receives just the right amount of metal for better and more uniform plates.

Safe, simple and easy at the *right* time, *pouring is impossible at the wrong time:* Control lever is immobile when casting box is full . . . when casting box is open . . . and, with a vacuum box, when it contains no mat. This triple-safety feature prevents time losses and eliminates the usual hazards of hot metal . . . reason enough to install the WOOD Pony Power Pump in your plant now!

Easily installed for use with your WOOD Pony Autoplate, the Pony Power Pump can also be adapted for use with other equipment where handle operated pump is now installed. Write for detailed information.

A WOOD Pneumatic Pumping System embodying all automatic and safety features of the Pony Power Pump is also available for easy hook-up to the WOOD Junior Autoplate and other equipment.



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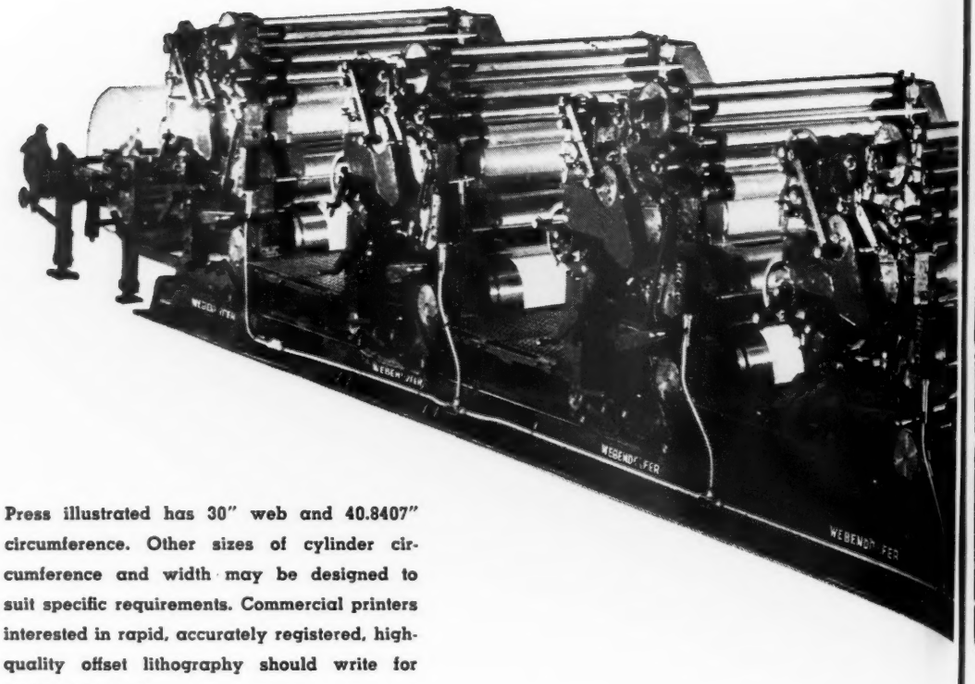
MULTICOLOR WEB-FED



Press illustrated has 30" web and 40.8407" circumference. Other sizes of cylinder circumference and width may be designed to suit specific requirements. Commercial printers interested in rapid, accurately registered, high-quality offset lithography should write for further information.

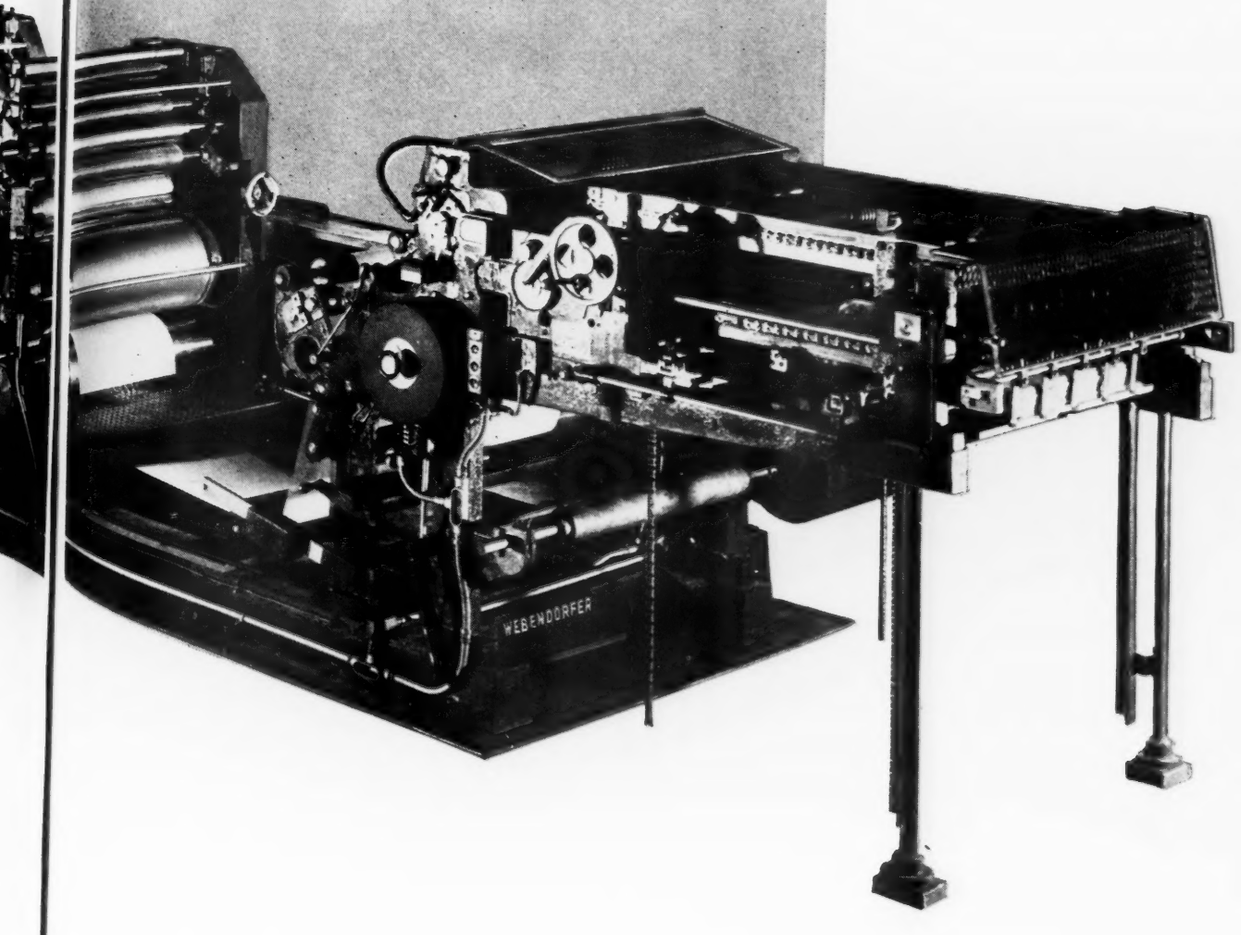
American Type Founders

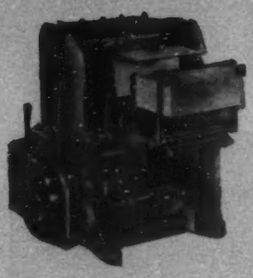
An ATF Associate

WEBENDORFER DIVISION

2 South Street, Mt. Vernon, N. Y.

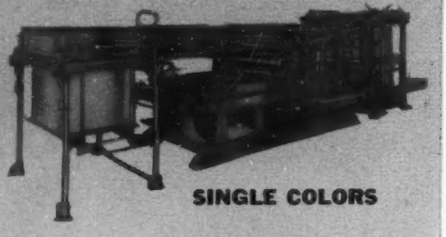
HERE is a way for printers with long runs in colors to increase their earnings at lower production costs. This **ATF-Webendorfer** press can handle many kinds of printed advertising, magazine covers and inserts, book jackets, box and gift wraps, labels and many other types of commercial work within the available web and cylinder dimensions. The press illustrated prints four colors one side or two colors each side at 8,000 to 12,000 cylinder revolutions per hour, delivering flat sheets face up or re-winding. Trimmers on both sides of the web are adjustable, and plate cylinders are adjustable both sidewise and webwise for register at operating speeds, thus minimizing makeready time. Press has automatic lubrication.



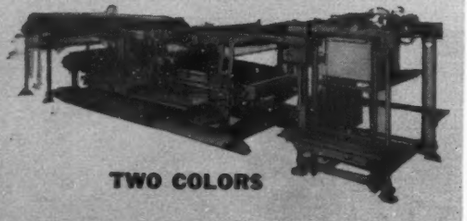


VERTICAL

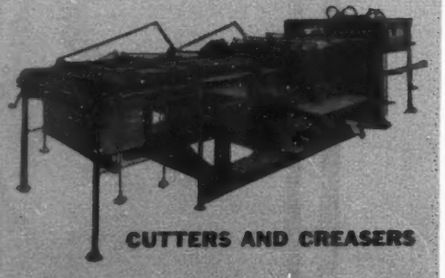
THE 29



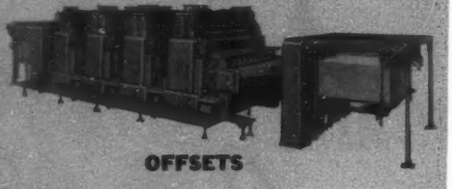
SINGLE COLORS



TWO COLORS

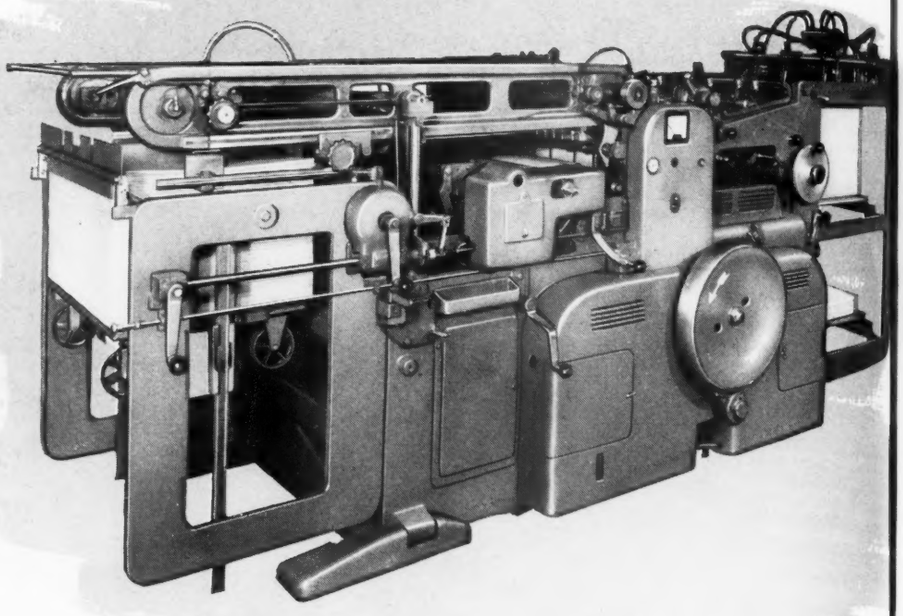


CUTTERS AND CREASERS



OFFSETS

SMALL SHOP... LARGE PLANT..



MIEHLE 29—a high speed automatic letterpress with a maximum sheet size of 22″ x 28″

Regardless of what size plant you operate or what type of printing you produce, Miehle has a press which will turn out high quality work more efficiently and economically than any comparable equipment.

Send for the new 24 page illustrated booklet describing in detail the Miehle 29 Letterpress.

MIEHLE PRINTING PRESS & MANUFACTURING CO.

WORLD'S LARGEST MANUFACTURER OF SHEET FED PRESSES

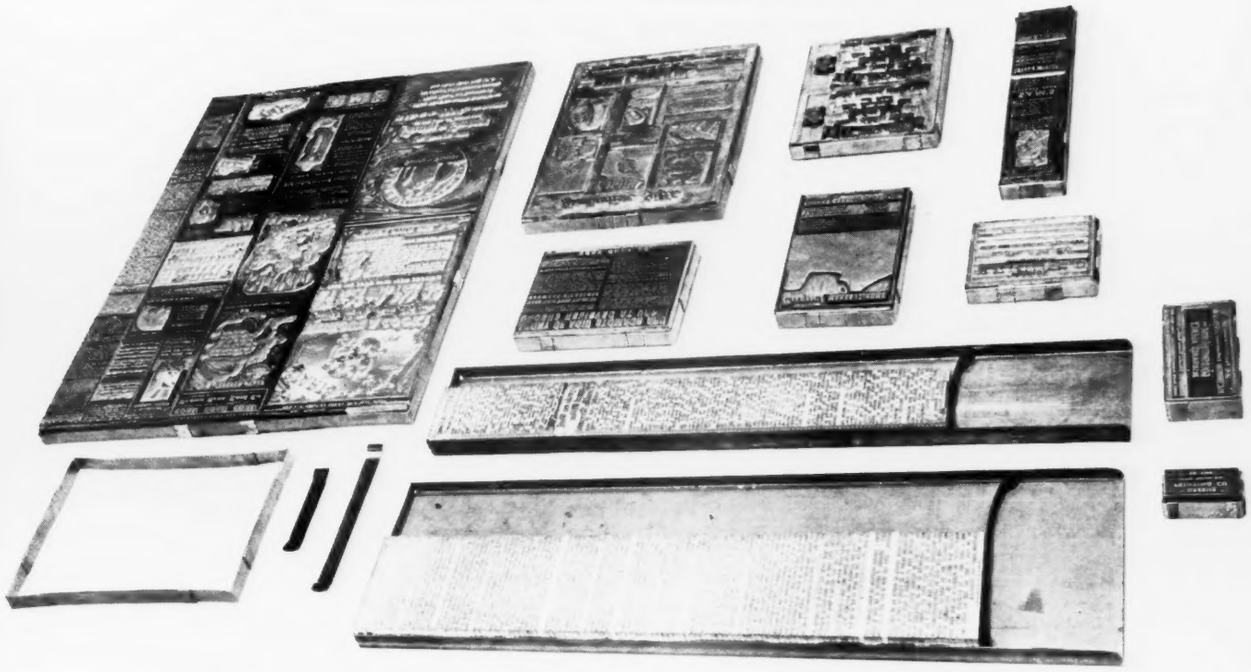
CHICAGO 8, ILLINOIS

NEW RIEHLOCK NEWSPAPER UNIT

ties up 184 ADS covering all sizes

Four times faster than string — safer — pays for itself in 4 or 5 uses

USED IN OVER 1000 COMPOSING ROOMS



Each RIEHLOCK Newspaper Unit consists of 184 tie-ups and 200 galley locks. The photograph above shows 9 different tie-ups out of the 184. At the upper left is a fully made up newspaper page enclosed in a RIEHLOCK Tie-up. At the upper right are shown various column width advertisements each enclosed separately in RIEHLOCK Tie-ups. At the lower right is shown a galley each of single and double column composition firmly locked in galleys with RIEHLOCK Galley Locks.

EACH RIEHLOCK Newspaper Unit Consists of

16 TIE-UPS
12 x 12 picas
will tie-up these ads in column inches
1 x 2 inches to 1 x 3 inches

24 TIE-UPS
12 x 18 picas
will tie-up these ads in column inches
1 x 3 inches to 1 x 5 inches
2 x 2 inches to 2 x 3 inches

24 TIE-UPS
12 x 30 picas
will tie-up these ads in column inches
1 x 5 inches to 1 x 8 inches
3 x 2 inches to 3 x 3 inches
4 x 2 inches to 4 x 3 inches

16 TIE-UPS
12 x 48 picas
will tie-up these ads in column inches
1 x 8 inches to 1 x 14 inches
4 x 2 inches to 4 x 3 inches
5 x 2 inches to 5 x 3 inches
6 x 2 inches to 6 x 3 inches

8 TIE-UPS
12 x 84 picas
will tie-up these ads in column inches
1 x 14 inches to 1 x 23 inches
7 x 2 inches to 7 x 3 inches
8 x 2 inches to 8 x 3 inches

16 TIE-UPS
18 x 24 picas
will tie-up these ads in column inches
2 x 3 inches to 2 x 7 inches
3 x 3 inches to 3 x 5 inches

16 TIE-UPS
24 x 30 picas
will tie-up these ads in column inches
2 x 5 inches to 2 x 8 inches
3 x 5 inches to 3 x 8 inches

16 TIE-UPS
24 x 48 picas
will tie-up these ads in column inches
2 x 8 inches to 2 x 14 inches
3 x 8 inches to 3 x 14 inches
4 x 4 inches to 4 x 7 inches
5 x 4 inches to 5 x 7 inches
6 x 4 inches to 6 x 7 inches

8 TIE-UPS
24 x 84 picas
will tie-up these ads in column inches
2 x 14 inches to 2 x 23 inches
3 x 14 inches to 3 x 23 inches
7 x 4 inches to 7 x 7 inches
8 x 4 inches to 8 x 7 inches

16 TIE-UPS
36 x 48 picas
will tie-up these ads in column inches
3 x 8 inches to 3 x 14 inches
4 x 6 inches to 4 x 14 inches
5 x 6 inches to 5 x 14 inches
6 x 6 inches to 6 x 10 inches

8 TIE-UPS
36 x 84 picas
will tie-up these ads in column inches
3 x 14 inches to 3 x 23 inches
4 x 14 inches to 4 x 23 inches
5 x 14 inches to 5 x 23 inches
7 x 6 inches to 7 x 10 inches
8 x 6 inches to 8 x 10 inches

8 TIE-UPS
48 x 60 picas
will tie-up these ads in column inches
5 x 8 inches to 5 x 16 inches
6 x 8 inches to 6 x 16 inches
7 x 8 inches to 7 x 14 inches

8 TIE-UPS
60 x 84 picas
will tie-up these ads in column inches
5 x 14 inches to 5 x 23 inches
6 x 14 inches to 6 x 23 inches
7 x 10 inches to 7 x 23 inches
8 x 10 inches to 8 x 23 inches

100—Galley End Locks
For one column galley
100—Galley End Locks
For two column galley

All RIEHLOCK products carry a 10-year guarantee against defective workmanship and material. They may be purchased in any one size. Prices on request. Write today for additional information.

Price Per Unit

$238.00

F.O.B. Cleveland, Ohio

The RIEHL GALLEY LOCK CO.

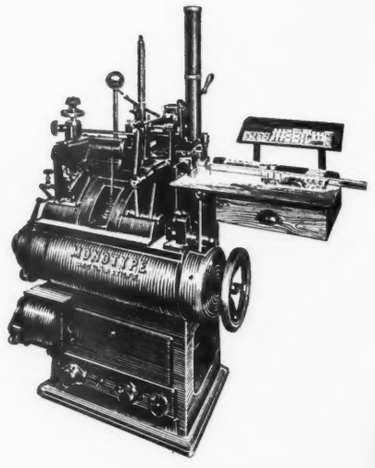
1312 ONTARIO STREET
CLEVELAND 13, OHIO

SELL MERCHANDISE!

Give the buyer of your advertising space the greater selling power of good typography. Make your display advertisements attractive, clear-cut and simple, properly balanced and legible, using appropriate modern type faces in harmony with illustrations and text—to invite reading, hold attention, stimulate desire and secure action.

Set Display Ads in Single Types

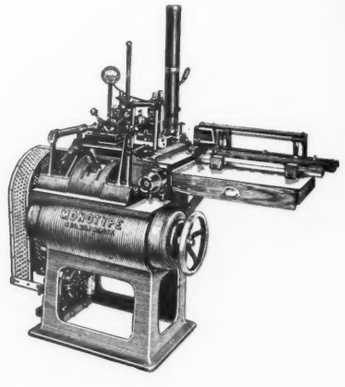
Hand composition of single types alone provides that flexibility in selecting the right sizes of appropriate type faces and ornaments—relating them to each other and to the space occupied—essential to good typography. It has been proved many times by tests on live copy during actual composing room operation that no other method of setting display advertisements is so fast as hand work from full cases and racks. When Monotype type and spacing material are available in unlimited supply the best typography is combined with speed and economy in production.



MONOTYPE GIANT CASTER
Makes Type and Precision Furniture in sizes from 14 to 72 pt. inclusive.

Profit by Non-Distribution

The Monotype system of non-distribution makes available all traditional and modern type faces generally used in advertising typography. It provides ample resources to meet peak loads and unexpected demands. It gives continuous production with a minimum of non-productive time. It assures an unlimited supply of new type, borders, rules, leads and slugs at all times. It produces the greatest volume of display linage at the lowest cost. It offers a dependable method of advertising composition; makes non-distribution complete.



MONOTYPE MATERIAL MAKER
Makes Rules, Decorative Borders, Leads and Slugs and Cut-Mounting Base in various sizes up to 36 pt.

NON-DISTRIBUTION MEANS NO DISTRIBUTION AT ANY TIME

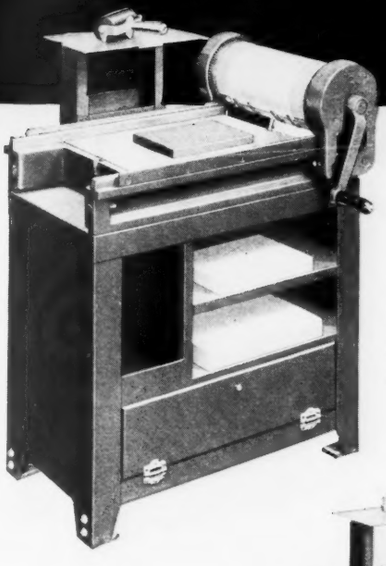
LANSTON MONOTYPE MACHINE COMPANY

MONOTYPE BUILDING, 24TH AND LOCUST STREETS, PHILADELPHIA 3, PENNA.

VANDERCOOK PRE-PRESS SYSTEM
—CUTS COSTS!

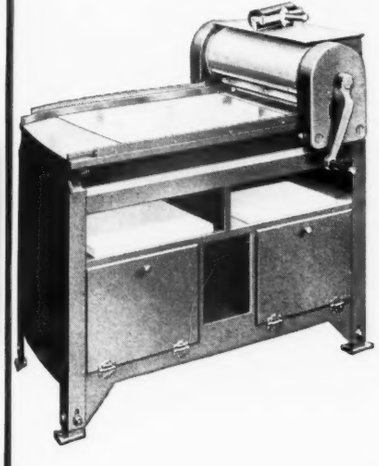
★ No. 3 VANDERCOOK

Bed size 15″ x 35″ . . . Maximum sheet 14¾″ x 20″ and Maximum form 14″ x 18″ . . . Floor space 2′2″ x 6′6″.



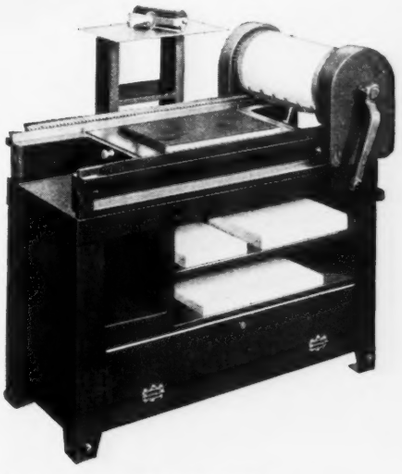
★ No. 1 VANDERCOOK

Bed size 16″ x 21″ . . . Maximum sheet 15¾″ x 19″ and Max. form 15″ x 17¼″ . . . Floor space 2′4″ x 2′8″.



★ No. 2 VANDERCOOK

Bed size 24″ x 50½″ . . . Maximum sheet 23¾″ x 26½″ and Maximum form 23″ x 24½″ . . . Floor space 2′8″ x 4′3″. .



★ No. 14 VANDERCOOK

Bed size 17⅝″ x 25½″ . . . Maximum sheet 17⅜″ x 25″ and Maximum form 16⅝″ x 23¼″ . . . Floor space 2′7″ x 3′9″.

★ No. 0 VANDERCOOK

Bed size 13″ x 32″ . . . Maximum sheet 12¾″ x 27″ and Maximum form 12½″ x 25″ . . . Floor space 1′6″ x 3′6″.

Proved Performance

CHECK THESE SAVINGS ON AD DISPLAY COMPOSITION effected by 12 newspapers

through the use of *Matrix Contrast Service*

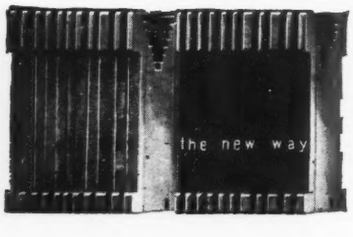
	BEFORE INSTALLATION				AFTER INSTALLATION			
Our Survey number	Total number machines in plant	Lines set	Total errors	Total errors per 100 lines	Lines set	Total errors	Total errors per 100 lines	Per cent reduction in total errors
46	11	2,420	146	6.03	3,281	126	3.84	36.23
52	19	9,261	892	9.63	6,810	474	6.96	27.73
58	49	27,120	1,903	7.02	25,748	1,073	4.16	40.74
107	11	1,680	82	4.88	3,578	92	2.56	47.54
121	13	2,245	121	5.39	2,114	43	2.03	62.34
125	9	2,413	50	2.07	2,930	35	1.19	42.51
131	20	2,887	113	3.91	3,523	95	2.69	31.20
146	15	1,994	105	5.27	1,444	55	3.80	27.89
166	8	2,454	111	4.52	2,957	80	2.70	40.26
174	17	1,304	90	6.90	10,101	273	2.70	60.86
186	20	3,152	128	4.06	9,591	281	2.93	27.83
191	8	3,237	150	4.63	4,072	126	3.09	33.26
	200	60,167	3,891	6.47	76,149	2,753	3.62	44.05

The above figures, accurately audited from original proofs, include only machine composition of display advertising in sizes up to 18-point.

Another important saving is the large increase in OK ads that pass through the composing room without a single error. In the twelve surveys listed above, an average of 36.28% of the ads handled went through OK before installation of Matrix Contrast service. After installation, 59.33% of the ads handled went through OK!

Detailed figures, and in most cases the proofs audited on these surveys, are available for inspection at any time *(subject to authorization of the plants concerned)*.

Uncle Mat says
Proofs stack up because the proofroom is usually behind the composition machines. Wrong fonts continue to cause errors until proofs are read and returned.



Matrix Contrast Service

Empire State Building, New York 1, N. Y.—326 W. Madison Street, Chicago 6, Ill.—1105 Trenton Street, Los Angeles 15, Calif.—Sole licensees of the Percy L. Hill Matrix Contrast Patent No. 1,796,023, other patent pending. European Agents: Funditor, Ltd., 3 Woodbridge St., Clerkenwell Green, London, E. C. 1.

Preliminary Tabulation—Graphic Arts Industries Statistics

(Money figures in millions)

Type of Industry	Number of Establishments 1947	1939	Total Receipts 1947	1939	Percentage Increase of Total Receipts
Printing and Publishing:					
Book Printing	156	199	$ 86.7	$ 36.3	139
Book Publishing	648	554	463.8	154.6	200
Commercial Printing[1]	11,933	10,295	1,521.7	607.8	150
Greeting Cards	162	109	123.9	39.7	212
Lithographing	1,413	757	487.6	156.4	212
Magazine Publishing	2,166	2,337	1,085.6	420.	158
Newspaper Publishing	8,339	7,278	1,917.3	904.9	112
TOTAL	24,817	21,529	$5,686.6	$2,319.7	
Service Industry:					
Bookbinding	686	620	$116.0	$ 44.6	160
Electrotyping & Stereotyping	237	234	59.0	29.0	103
Photoengraving	770	694	133.5	55.6	140
Typesetting	794	641	75.7	25.1	202
TOTAL	2,487	2,189	$384.2	$154.3	

[1]Includes 11,801 commercial letterpress plants reporting receipts of $1,435.7 million; 99 private (letterpress) plants reporting value of production of $36.0 million; 33 gravure plants reporting receipts of $50.0 million. For 1939, 10,271 commercial letterpress plants and private (letterpress) plants reported receipts of $589.2 million; 24 gravure plants reported receipts of $18.6 million.

Preliminary Tabulation Graphic Arts Industries

GRAPHIC Arts industries show an average increase of over 150 per cent in total receipts during 1947 as compared to 1939. These statistics, recently released, are derived from a *preliminary* tabulation of manufacturers' reports taken in the 1947 Census of Manufactures. The individual reports, published by the U. S. Department of Commerce, discloses statistics concerning newspaper, book and magazine publishing, lithographing, greeting cards, commercial and book printing, bookbinding, and service industries.

It is interesting to note that predictions about the growth of a number of Graphic Arts Industries have been substantiated by release of the U. S. Dept. of Commerce's recent preliminary reports. Offset-lith industry spokesmen including H. A. Porter, Vice President of Harris-Seybold Co., have been claiming a $500 million annual volume. The report shows actual total receipts of $487.6. Several months ago, the Intl. Typographic Composition Assoc. through its executive secretary, Frank M. Sherman claimed an annual volume of $75 million. The Government's preliminary report shows the industry to have passed the Association's estimate, it being stated as $75.6 million.

The Commercial Printing industry showed an increase of 150 per cent in total receipts during 1947 as compared to 1939. In the perennial argument as to which state leads in the commercial printing field, New York is on top with the most establishments, but Illinois has a larger volume of total receipts. Illinois also leads in the number of persons employed in the commercial printing industry and the paid salaries and wages. In defining the commercial printing industry, it is stated by the Dept. of Commerce that establishments primarily engaged in letterpress and/or gravure printing and private printing plants are included in the report.

The Lithographic industry has perhaps made the greatest increase in total receipts, enjoying a 212 per cent increase over 1939. New York State leads the field in number of establishments, employees, wages paid, and total receipts.

Also in the 212 per cent increase of total receipts category is the Greeting Card industry. The industry includes both greeting card publishers (who may or may not do their own printing) and greeting card printers. This accounts for 162 establishments, an increase of 53 over 1939. Publishers sales totaled $103.8 million; printers' receipts for printing greeting cards for publishers were $8.6 million; and receipts for secondary activities of these two groups amounted to $11.5 million.

Total receipts for the Newspaper Publishing industry in 1947 climbed 112 per cent higher than those reported in 1939. Production and related workers increased over 20 thousand and wages over $200 million. Value added by manufacture in the industry during 1947 amounted to an increase of 108 per cent over 1939.

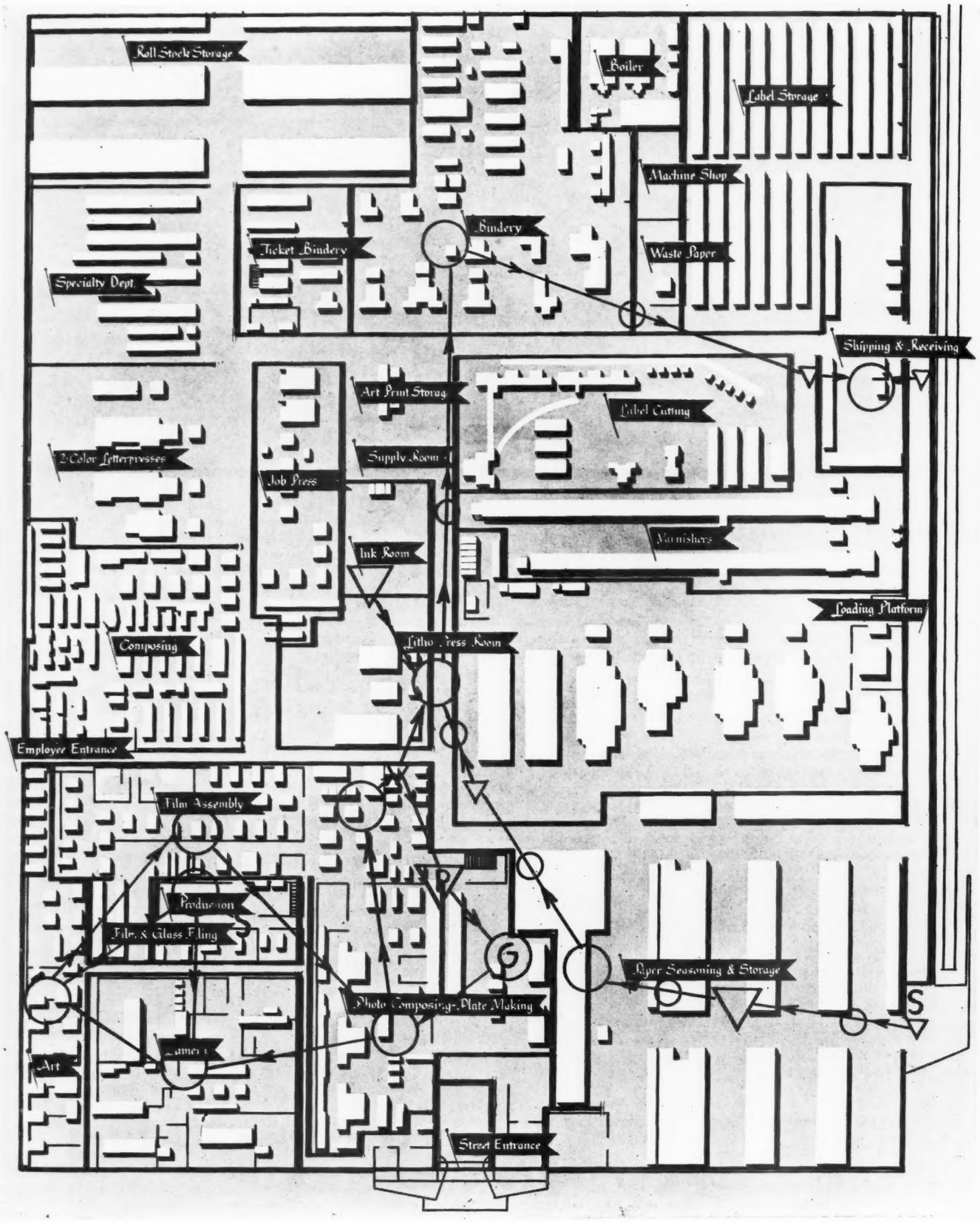
Other notable increases were reported by the Bookbinding, Magazine Publishing, and Book Publishing industries. The Book Publishing industry reported receipts of $463.8 million for 1947. This is an increase of 200 per cent over 1939.

The government reports were figured only on plants doing gross annual sales of $5 thousand or more.

While no announcement has been made by J. C. Capt, Director of the U. S. Bureau of the Census, it is expected that final reports respecting the Graphic Arts Industries will be made at an early date —perhaps in the fall of 1949.

Edwin S. Keller, appointed Vice President and Operating Manager, Standard Gravure Corp.

Lisle Baker jr., Vice President of Standard Gravure Corp., has announced the appointment of Edwin S. Keller to the post of Vice President and Operating Manager. Keller formerly served as Standard Gravure as Sales Manager. Two other promotions were announced at the same time. Melzar Lowe, former assistant production manager, was made Assistant Manager. Galt Miller, a member of the advertising staff of the Louisville (Ky.) *Courier-Journal* and *Times*, was appointed to the sales staff of Standard Gravure.


Roll Stock Storage
Boiler
Label Storage
Machine Shop
Bindery
Ticket Bindery
Waste Paper
Specialty Dept.
Shipping & Receiving
Art Print Storag
Label Cutting
Supply Room
2-Color Letterpresses
Job Press
Varnishers
Ink Room
Loading Platform
Litho Press Room
Composing
Employee Entrance
Film Assembly
Production
File & Glass Filing
Paper Seasoning & Storage
Photo Composing-Plate Making
Art
Street Entrance
S

⬅ Equipment Layout and Workflow in plant of H. S. Crocker, Inc., San Bruno, Calif. Story about the new Crocker plant was published in the June issue of *Printing Equipment Engineer*. The accompanying equipment chart, however, did not reach us in time for publication with the article. In itself, it is of sufficient value to our readers because of the variety of operations carried out in this combination commercial printing plant.

This comprehensive floor plan chart graphically shows departmental arrangement and working units in the 3½ A. one-floor building. The new building is 300 ft. wide by 400 ft. long. In the workflow diagram superimposed upon the equipment chart is shown movement of a typical lithograph job. Symbols used are as follows:

—Operation

—Transport

—Permanent Storage

—Temporary Storage

S—Start of Job

G—Plate Graining

P—Plate Storage

To follow the workflow of a lithograph job, the paper enters temporary storage at Triangle S (lower right) and goes into Paper Seasoning and Storage; it is then transported into the lithographic pressroom, to the bindery, thence to Shipping at upper right.

Meanwhile, the order for the job is received in the Production Office, and the copy is sent to Camera Room, to Art, to Film Assembly, to Photocomposing, to Platemaking to Lithographic Pressroom.

With respect to the pressrooms, most of the larger offset and letterpress equipment was made by Harris-Seybold Co. and Miehle Printing Press & Mfg. Co. Job presses are by Potter, Kluge and Heidelberg. The web presses were made by New Era Mfg. Co. and Young Engineering Co. Varnishing equipment by Steve Garrasino of San Francisco, and the drier by Merelich Mfg. Co., San Mateo. The paper seasoner was custom-built by Crocker engineers.

Color

From Black-and White

A FLEXIBLE color conversion process for the professional production of full-color pictures from black-and-white negatives or from color transparencies has been announced by the Eastman Kodak Company. The technique, known as the Kodak Flexichrome Process, uses color dyes to convert a special photographic print to a full-color picture. The true dyes are applied with water color brushes.

It will enable subjects, which for technical reasons are difficult to photograph with color film, to be reproduced in color. Sponsor states that almost any size transparency for photomural or display use can be made by Flexichrome Process.

The process is adapted for advertising and editorial work where a number of different illustrations ranging from line drawings to color transparencies are to be combined in the production of an advertisement or editorial page. Manufacturer claims that Kodak Flexichrome Film simplifies this work since any type of continuous tone or line copy can be copied on the film, stripped into position on the combined page, and colored with one color, two colors, or full color as necessary.

Any number of prints can be made from any given negative but each print must be individually colored. Color applied to the print can be modified or entirely removed, or changed to some other color, at will. This can be done at any time.

Basically, the Kodak Flexichrome Process is a technique whereby the silver in a special photographic image is replaced by color dyes. This is accomplished by the use of a special relief stripping film—on which the print is first made—and by a special processing technique in preparing the image for color. The process cannot be used with ordinary photographic papers or films to produce color images.

The production of a Kodak Flexichrome Print begins with exposure of the special film to light and the black-and-white picture negatives. This can be done either by enlargement or contact printing and is similar to the exposure of photographic papers.

The stripping film is then developed, however, in a special "tanning" developer which hardens the gelatin where the silver has been exposed to light, and leaves it soft at all other points. After development this soft or soluble gelatin is washed away by rinsing the film with hot water. This rinse results in a relief image appearing in the gelatin. Graduations in tone are represented in this relief image by various thicknesses of gelatin. The thicker the gelatin the deeper the tone. Thus, shadow areas which are deep in tone are represented by thick sections of gelatin, while highlight areas which are very light or almost entirely lacking in tone are represented by thin sections. The silver grains which produce the picture image are embedded in the gelatin.

After the relief image has been produced the silver is bleached out. This leaves a hardly perceptible image on the film. The picture is brought back to visibility by immersing the film in a black dye which is absorbed by the gelatin in direct proportion to its thickness. This black dye is known as the modeling agent since it permits the worker to evaluate the photographic tones and qualities of his picture for coloring purposes.

The matrix film, after dyeing, is floated in a warm water bath for a minute or two to loosen the adhesive which holds the relief image membrane to the film support. The membrane is then stripped from its film support and transferred to its final paper support. This may be any standard photographic paper.

Research Building — Arthitect's drawing of a new building now under construction to house Graphic Research, Inc., an affiliate of Vandercook & Sons, Inc., for the development of methods for the advancement of the Graphic Arts industry. A model printing plant will be installed, including a complete Pre-Press Dept., in order to evaluate the new methods and equipment under test. Rigidly controlled atmospheric conditions will be provided, including electrostatic filters for eliminating dust, and other modern air conditioning devices for maintaining year-round even temperature and humidity. Graphic Research is under the direction of O. F. Duensing, President. The new building is expected to be finished and ready for occupancy in November of this year.

When dry, color may be applied to the print. Water-color type brushes are used to apply color. As the dyes are applied to the print they are absorbed by the gelatin relief image. Each dye, as it is applied, replaces any other dye tha. may already be in the gelatin. Thus a flesh tone applied to the print replaces the black modeling agent. Color applied in this manner becomes an integral part of the picture and preserves the purely photographic definition of the image. The fact that the picture has been hand-colored is difficult to detect, when color is properly applied.

The intensity of color is dependent upon the amount of dye applied with the brush. Color is fixed and evened out by application of a 2 per cent acetic acid rinse.

Color, in general, need not be applied with great care. Large washes covering entire areas simultaneously are usually preferable. Borderlines and edges are claimed not to present a problem. This is because most borderlines between local areas are described by a dark line or shadow, and the darker color can be brought sharply to the edge of the lighter color.

In the event that any serious color mistake is made by the colorist, a new application of the standard black modeling agent to the print will result in the removal of all color so that the photographer can start the coloring process over again. This can be done, without damaging the print, as many times as is necessary.

The surface of a completed print can be protected from abrasions and fingerprints by a coating of Kodak Flexichrome Print Lacquer. The lacquer may be applied with a brush, spray, or sponge, or the print may be dipped in a tray filled with lacquer.

When the print is dry it can be cropped and mounted with a dry mounting press or by any other method customarily used with black-and-white prints.

Blueprint

of Printing Equipment Industry's Position in Standby Program

By PETER B. B. ANDREWS*

**Former Industrial Economic Advisor, Printing & Publishing Division, War Production Board*

III.

IN RECENT issues of *Printing Equipment Engineer*, we discussed the hits and misses, trials and tribulations of setting up a regulatory body over the Printing & Publishing Industry and of efficiently conducting that regulatory body. History truly was in the making in those days—vital history—since we were forming for the sake of posterity a significant pattern of events that have formed a blueprint of the program to be followed in the event of any future emergencies, whether these emergencies be in war or peacetime.

Our mistakes and accomplishments up to the latter part of 1944 were realistically depicted in the April and May issues of *Printing Equipment Engineer*. As we pointed out, on all Federal Government purchases of printing machinery, L-226 made possible close cooperation with the Congressional Joint Committee on Printing. Under Federal statute, all "Field Printing Plants" had to be authorized by the Committee and all equipment purchases had to be approved by that Committee.

In the administration of L-226, we aided the Joint Committee on Printing by withholding delivery approvals until that Committee had approved the installations. Approval of deliveries to civilian and export buyers was limited to replacements in accordance with policies already established in the Printing & Publishing Division of W.P.B. A few departures were made from the policy where increased requirements in Hawaii or on the West Coast dictated. We extended the replacement policy also to all Canadian and Latin American Country applications.

The third part of L-226 production quotas and delivery requirements on repair parts and operating supplies was troublesome and not worth the effort. The Printing & Publishing Division wanted to conserve critical materials and at the same time to insure adequate stocks of repair parts. But we mistakenly feared that unless we limited production of parts to a quota that manufacturers might divert parts from repair purposes to incorporate them in new machinery.

Actually, with selling prices of repair parts limited to October 1941 prices by O.P.A., there was no incentive for manufacturers to produce more than the trade needed. The percentages that we chose for permitted quotas in the order were more than wnough for some kinds of machines and inadequate for others. Another requirement about repair parts —namely, the certification by the buyers that they were scrapping parts of like kind and size, was a nuisance.

The amount of scrap metal that was generated by this device was trifling. But it reflected itself in making compliance officers for the WPB out of the 130 machinery builders, requiring them to set up "blacklists" of those customers for parts who failed to furnish certifications. Actually, our fear that without the certification some printers might try to "hog" more repair parts than they needed was groundless.

For years the manufacturers had regulated their own repair order departments —and they did not need to be told not to jeopardize their repair stocks by overselling to certain greedy customers. They were responsible to their whole list of customers to provide repair parts on call. They were not going to risk losing the good will of nine printers by furnishing the tenth one with repair parts enough to serve all ten.

The work load of PD-556 applications for new machinery gradually increased

Plastic Plates for Offset Duplicating

(By M. S. Kantrowitz, Technical Director, U. S. Government Printing Office, Washington, D. C.)

THERE are on the market at present, three types of plastic plates suitable for offset duplicating. One type is a plate having a paper base coated with a special pliable plastic. This type of plate is used for direct image offset duplicating. That is, the type matter or image to be reproduced is applied directly to the surface of the plate by means of a typewriter, drawing pen or pencil, brush or crayon. After the image has been applied, the plate is attached to the plate cylinder of an offset duplicator. There are different grades of these plates and, depending upon the quality used, from 100 to 5000 good readable copies may be obtained from them. These plates are simple and economical in operation and are suitable for average quality work, but they are not recommended for the photographic reproduction of original copy.

Another plate has a paper base coated with a combined plastic and colloid. This type of plate is used for producing halftones and other photomechanical images. The plate is submerged in a light-sensitizing solution for a few minutes and hung in the dark to dry. Upon drying, the plate becomes light-sensitive in the same manner as a bichromated albumen-coated zinc or aluminum plate. Under average conditions, approximately 5000 copies from this type of plate can be expected.

A third type of a plastic coated steel plate used as an inexpensive substitute for zinc or aluminum plates to produce halftones and photo images. It is prepared and handled in the same manner as a zinc or aluminum lithographic plate. Top quality work is possible with this type of plate up to approximately 10,000 copies. This plate is for one-time use only and cannot be re-grained, but the cost of a new plate is only approximately that of regraining a zinc or aluminum one.

to a peak of about 400 cases a week. Analysis of actions revealed that fully half of the applications were for low value items ranging from $25 to $200 and that 93% of these low value cases were being granted. In February 1944, we had formally sought to amend L-226 further to permit production and delivery of low value items up to $200, to delete the repair part delivery restrictions that required certification of the scrapping of similar old parts, and to increase the production of repair parts and supplies.

But we failed to get Division Requirement Committee approval for these proposed changes. It was a year, then, since we had amended L-226. Meanwhile a new system of safeguards and procedures had been set up in WPB. There was the Program Bureau, the Program Implementation Office, the Division Requirements Committee, and the need, as well, to get Industry's own recommendations.

It took us from February to October to effect the desired amendments to L-226. In the spring of 1944 we had set up four Industry Advisory Committees. These were a segment type of committee, covering Typesetting and Composing Equipment, Printing and Lithographic Platemaking Equipment, Printing Presses, and Bindery Equipment.

These committees met in May, June, and July, 1944. They all recommended changes in L-226 of the kinds we had sought to make in February. Then we prepared proposed programs for production based on earlier production authorized by the appeal procedure. In August 1944, the Division Requirements Committee approved two decisions, authorizing production of new machinery up to $7 million per calendar year quarter; and parts and supplies up to $ million per quarter. These decisions were implemented by issuance of L-226 as amended October 2, 1944.

By the amendment of the order, our work load dropped from 400 applications to 200 a week. Thenceforth, production of new machinery was scheduled and authorized on Form GA-1850 for immediate and for advance quarters, within program limits of $7 million per quarter. Actually, by May 1945, the greatest amount scheduled was $5 million for the third quarter of 1945. By this advance scheduling, we were enabled, too, to grant advance allottments of controlled materials on CMP at basic AA-3 ratings in accordance with Program Determination 500-B.

Thus, because of advance allottments, this basic rating became of practical value in the procurement of castings and components. By the amendment, too, all delivery controls on used machinery were abandoned. Production limitation on repair parts was substantially eased. And the certification requirement on repair parts purchases was abandoned.

Along with many other limitation orders, L-226 was revoked May 16, 1945, as part of the V-E Day relaxing of controls. Actually, it did not mean much to our manufacturers at once. They were still heavily committed on their war contracts. They still couldn't get enough more materials under CMP for civilian production to make much difference in the supply of new machinery. It was not until V-J Day in August 1945, that the great bulk of war contracts was cancelled out, and our manufacturers were free to get ready to resume civilian production.

Full credit must be given to our manufacturers for the splendid war job they did. They converted early in war. A tabulation of WPB 732 reports for August, 1942, covering 76 manufacturers (fully 90% of the industry's total capacity) showed $14 million shipments in July, 1942. Of these 87% was war work, and 13% civilian. At that time the industry showed a backlog of unfilled orders of $211 million. Of this, 97% was war work, 3% civilian.

Later the reporting bases were changed so that smaller companies no longer reported on Form WPB 732. But we did have tabulations covering six calendar quarters, beginning with the fourth quarter of 1943 and ending with the first quarter of 1945. The number of companies reporting ranged from 35 to 41; the total quarterly shipments ranged from $42 million to $48 million, a figure close to the whole value of the industry's peacetime production in 1939.

It is conservative to say that every four months our manufacturers shipped as much as they did in the whole peacetime year of 1939. But what they shipped was not printing machinery. It was gun mounts, fire control instruments, range finders, rockets and shell cases. For the 18-month period covered in the tabulations, the degree of conversion to war work, that is, shipments of combat material and machine tools, ranged from 82.3% to 84.5%.

We claim that no other segment of the metal-working industry showed a higher degree of conversion to war work. Accordingly, at least 22 individual printing machinery builders were awarded Army-Navy E's for production excellence, one with six, many with four and five renewal stars. Among the press builders especially was the record outstanding; every newspaper and magazine press builder had won the award.

If we had to regulate the printing machinery industry again, we would certainly, in the light of this related experience, favor production limitations by an authorization procedure as provided in L-226, as amended October 2, 1944. We would favor delivery controls on a delivery authorization form like PD-556 or WPB 1319, including like controls by the Army and Navy.

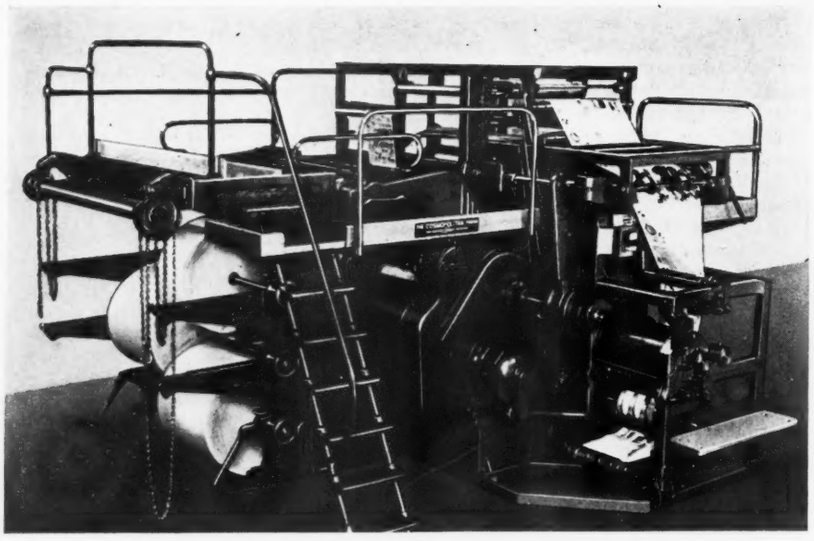
We would probably try to regulate used as well as new machinery as we did in the original L-226, but would confine such regulation to items in critically short supply. We would remove restrictions on repair parts—both production and deliveries. And we would have set up industry advisory committees at the earliest possible date instead of letting it drag out too long without them. They were of very great help to us in the last great emergency, and I am certain will be of further great influence and benefits in any future emergency, be it during wartime or peacetime.

(*Concluded*)

Printers' Safety Manual

A plan calling for the preparation of a manual of safety instructions for the printing industry was approved by the executive committee of the Printing and Publishing Section of the National Safety Council at a recent meeting held in the plant of the Western Printing & Lithographing Co., Poughkeepsie, N. Y. Preparation of industrial data sheets were also planned which will give pertinent safety information on a number of subjects including handling of roll stock, skids and platforms, housekeeping for safety in the pressroom, and static electricity. Discussions pointed up the need for coordination between the printing industry and equipment manufacturers in connection with safety devices which should be installed at the time of manufacture.

Champion's Texas Plant — Part of the group of 75 guests who visited the Houston Div. plant of The Champion Paper and Fibre Co. recently. Brief ceremonies with Reuben B. Robertson, President, presiding marked the first Texas production of fine white papers for printing and converting purposes. Champion officials in attendance included R. B. Robertson, jr., Executive Vice President; Dwight Thomson, Vice President; Herbert Suter, jr., General Sales Manager; and W. R. Crute, Houston Div. Manager.



View of Wood Cosmopolitan Press. Designed for smaller-city newspaper production. Design of press permits use of semi-cylindrical stereotype plates. Newly developed Intrasertor makes possible 2-page jumps on collect runs.

Wood

Cosmopolitan Press

ON July 19, the Wood Newspaper Machinery Corp., presented and demonstrated its new cosmopolitan Press to editors, publishers and other key men in the Graphic Arts industry. The ceremony, preceded by a luncheon at the Park Hotel in Plainfield, N. J., took place at the Wood plant in that city.

The Cosmopolitan Press is designed specifically for the smaller-city publisher. It is erected on its own bed-plate which makes possible installation on any flat, solid floor.

The Cosmopolitan Press is supplied with full-size forged steel plate and impression cylinders mounted in preloaded bearings. Form rollers are carried in roller bearings.

The design of the press permits use of semi-cylindrical plates, but is not limited to 4-page jumps on collect runs since the newly developed Intrasertor makes possible 2-page jumps on collect runs.

Fountain bowls are of 2-page width, carry no operating mechanisms, and are easily removed for cleaning for color runs. For color runs, there is no necessity for reversing couples or units.

Other features of the Cosmopolitan Press include: (1) Gears and moving parts are all enclosed in aluminum guards. (2) Compensator handwheels and other adjustments are conveniently located. (3) Plates can be run in any position on the press without the need of dummy plates. (4) A driven slitter is furnished so that either full-size or tabloid-size newspapers may be produced. (5) In the folder is included an external gear folding blade motion with driving connections fully enclosed.

Tachometer and counter are furnished. A switch is provided so that the counter may be made to tally either straight or collect products as desired. In addition, a second counter or tachometer can be added at some remote point if desired.

In the driving equipment included cabinet-enclosed controls and single drive motor. The motor is directly connected to the impression cylinder of the press unit by a multiple strand chain.

Ductor rollers and ductor adjustments are located on the outside of the unit. Fountain keys are located on the outside of the unit, and are placed in line with the column being adjusted. The operator can see the ink as it comes up on the fountain roller while he adjusts the fountain keys.

The Intrasertor is an integral part of the Cosmopolitan Press. It "intraserts" a 2-page sheet in one section of a two-part product when desired. This permits increasing a regular-size newspaper by 2 pages and a tabloid-size paper by 4 pages, even though the folder is running a collect product. Collect products may be obtained with one section carrying 2 pages more than the other section.

On the Cosmopolitan Press, three couples (1½ units) are needed for papers up to 24 pages, and 5 couples (2½ units) are needed for papers up to 40 pages. Provisions are made for additional printing facilities for the production of still larger papers if desired.

An arrangement consisting of 1½ units, Intrasertor and folder will produce the following standard-size newspaper products:

Black: One-section papers 4-6-8-10-12 page products; *Two-section papers* 8-12-14-16-18-20-24 page products.

Black and Color: One-section papers 4 pages black with 1 or 2 pages in 1 extra color; 6 pages black with 1, 2, or 3 pages in 1 extra color; 8 pages black with 1, 2, 3, or 4 pages in 1 extra color; 8 pages with 6 pages in black and 2 pages in 3 colors; 4 pages with 2 pages black and 2 pages in 4 colors. *Two-section papers* 8 pages black with 2 or 4 pages in 1 extra color; 12 pages black with 2, 4, or 6 pages in 1 extra color; 16 pages black with 2, 4, 6, or 8 pages in 1 extra color; 16 pages with 12 pages black and 4 pages in 3 colors; 8 pages with 4 pages black and 4 pages in 4 colors.

Products of tabloid size can be produced in the above combinations of twice the number of pages in each case. All such tabloid products will be in one section.

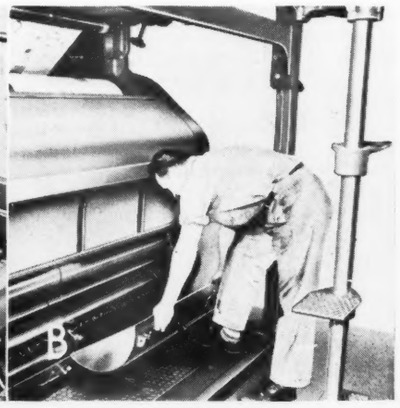
Space requirements for the Cosmopolitan Press of 24-page capacity, control panel and working room are 23 ft. by 23 ft. with a 14 ft. ceiling.

Detailed information is available by writing Wood Newspaper Machinery Corp., 501 Fifth Ave., New York, N. Y

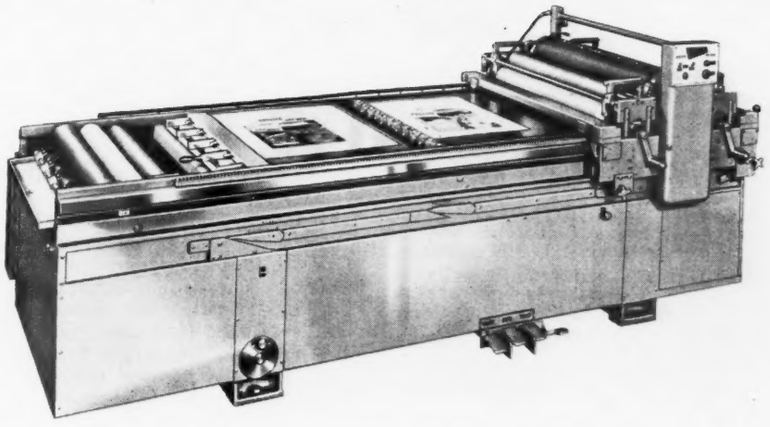
Do you want a mechanical or production executive?

Do you want a mechanical or production executive position? See page 71.

View of Intrasertor which is an integral part of Wood's new Cosmopolitan Press. It "intraserts" a 2-page sheet in one section of a two-part product when desired.



Fountain bowls of the Wood Cosmopolitan Press are of 2-page width, carry no operating mechanisms, and are easily removed for cleaning for color runs.



View of Vandercook Offset Proof Press. Completely power operated, with automatic inking and dampening. Inking and dampening units may be changed quickly when proving color. Arrangement of the component printing units is as follows: The printing plate is clamped flatwise at left center of the press bed as shown in this illustration; this corresponds to plate cylinder on standard offset production presses. Sheet upon which the image is to be printed is held flatwise at the right of center of the press bed and is held in exact register position by grippers extending across the press bed. Grippers are foot-operated by pedal from the floor. Image is transferred from cylinder blanket to flat paper sheet. Max. plate size is 25½ in. by 36 in. Max. printing surface is 22½ in. by 35 in.

Offset Proof Press

AN OFFSET proof press has been announced by Vandercook & Sons, Inc., as now being in production. On the press can be proved max. plate size of 25½ in. by 36 in. with max. sheet size of 28 in. by 36 in. The press is stated to be completely power-operated with automatic inking and automatic dampening mechanisms. Printing speed of the press can be regulated from 7 sec. for a complete cycle to 20 sec. The driving motor does not travel with the cylinder but is mounted under the press bed.

The arrangement of the component printing units of the press is as follows: The plate itself is clamped flatwise at left center of the press bed as shown in the accompanying illustration; this corresponds to the plate cylinder on standard offset production presses. The sheet upon which the image is to be printed is held flatwise at the right of center of the press bed and is held in exact register position by grippers which are foot-operated from the floor; this corresponds with the impression cylinder of the standard offset production press. The traveling press cylinder is a combination offset and impression cylinder, the inked image from the plate being transferred to the blanket or impression cylinder to the flat sheet of paper on the press bed.

The roller dampening mechanism is mounted at the left of the offset-impression cylinder carriage and the water fountain with rollers at the extreme left of the press bed. The dampening rollers contact the plate on both the forward and back strokes of the cylinder carriage.

The inking rollers are mounted on the right of the offset-impression cylinder carriage (not visible in the illustration) and the fountain with ductor roller, motor-driven drum and vibrator is mounted at the extreme right of the press bed. The inking rollers contact the plate once for each impression immediately after the last stroke of the dampening rollers.

Suitable mechanisms are provided to automatically raise and lower the offset-impression cylinder and the dampening and inking carriages so that when the plate is being inked and/or moistened the offset-impression cylinder is raised from the plate. Likewise, when the offset-impression cylinder is operating directly upon the proof sheet, the dampening and inking carriages are raised above the printing level.

Manufacturer describes the system for controlling the water supply by stating it consists of (1) a rough chrome plated motor-driven drum running in a water pan, (2) a ductor roller made up of a linen sleeve drawn over a synthetic rubber base, and (3) a motor-driven rough chrome-plated drum for transferring the water to damping rollers. Length of time ductor roller contacts the water drum can also be controlled.

The drive for the inking and dampening rollers is synchronized and consists of a stationary V belt mounted on springs. Sponsor states this design results in streakless impression.

A safety bar is affixed to the leading edge of the cylinder carriage ahead of the inking and dampening units so that the press will be stopped when the operator's hand or other obstruction contacts the safety bar itself.

A special brake is provided on the press for bending each printing plate to the proper angle necessary for inserting in the plate clamp on both the proof and production presses.

The press is built with an adjustable sheet bed, consisting of two wedge-shaped plates which provide an accurate impression adjustment of 0.120 in. Turning a hand wheel raises or lowers the bed to the desired height. Exact height position of the bed is indicated by a dial graduated in thousandths of an inch.

Other features of the press are as follows: (1) A stepless speed control makes possible complete operating cycles ranging from 7 sec. to 20 sec. (2) Sheets are fed to foot-operated grippers and micrometer guides, consisting of six front guides and a right and left side guide. (3) To speed up color proving, the inking and the damping units are designed for quick changing. (4) Washup of the ink fountain can be accomplished by loosening two thumb screws and removing the fountain blade.

Floor space is 5 ft. by 11 ft. Net weight is 6800 lbs. Optional equipment for color proving consists of inking units with synthetic form rollers dampening units with covered rollers complete except for steel vibrator.

Further information may be obtained by addressing your request to *Printing Equipment Engineer*.

Louis A. Lara, Export Manager of the printing ink division of the J. M. Huber Corp., is spending two months studying the Graphic Arts facilities and methods now employed in six European and Scandinavian countries. He will visit printing plants in France, Italy, Belgium, Denmark, Sweden and Norway.

Sales Symposium—Pictured are officers and representatives of Tingue, Brown & Co., at the 47th annual sales meeting held recently at the company's new plant in Atlanta, Ga. The three day meeting included discussions on the latest developments in printing press blankets and drawsheets.

SPARTANS, no serifs, monotone, traditional 11

AIRPORT BLACK CONDENSED TITLE—No. 5802, Special Matrices — Single Types

ABCDEFGHIJKLMNOPQRSTUVWXYZ $12

Specimen is 18 pt.

18 pt²	12A	$3.20	(Caps, pts., figs. only)						
24 small²	8A	3.70	(Caps, pts., figs. only)						
24 large²	8A	4.35	(Caps, pts., figs. only)	36 pt²	5A	$6.35	(Caps, pts., figs. only)		
30 pt²	6A	5.45	(Caps, pts., figs. only)	48 pt²	4A	7.55	(Caps, pts., figs. only)		

20TH CENTURY ULTRABOLD COND.—No. 610, Lanston — Single Types

ABCDEFGHIJKLMNOPQRSTUVWXYZ& .,-:;'!?

abcdefghijklmnopqrstuvwxyz $1234567890

8 pt²	30A	$2.55	60a	$3.05	$5.60	30 pt²	6A	$4.45	10a $4.20	$8.65
10 pt²	26A	2.70	53a	3.15	5.85	36 pt²	5A	5.50	7a 4.45	9.95
12 pt²	24A	3.30	47a	3.70	7.00	42 pt²	5A	7.60	7a 7.25	14.85
14 pt²	22A	2.85	42a	3.25	6.10	48 pt²	4A	5.95	6a 5.00	10.95
18 pt²	12A	2.30	26a	3.25	5.55	60 pt²	3A	7.60	6a 7.20	14.80
24 pt²	8A	3.25	17a	4.20	7.45	72 pt²	3A	10.90	5a 8.30	19.20

20TH CENTURY LIGHT—No. 606, Lanston — Single Types

ABCDEFGHIJKLMNOPQRSTUVWXYZ& .,-:;'!?

abcdefghijklmnopqrstuvwxyz $1234567890

Specimen is 12 pt.

6 pt²	55A	$1.60	110a	$1.95	$3.55				
8 pt²	26A	2.35	52a	2.90	5.25				
10 pt²	25A	3.30	48a	3.75	7.05	24 pt²	11A	4.00	22a 4.70	8.70
12 pt²	22A	3.25	43a	4.20	7.45	30 pt²	9A	5.50	18a 6.70	12.20
14 pt²	21A	2.40	42a	2.80	5.20	36 pt²	5A	6.85	10a 7.00	13.85
18 pt²	16A	$3.30	32a	$3.95	$7.25			See also italic		

SPARTAN BOOK, Linotype — Slugs

ABCDEFGHIJKLMNOPQRSTUVWXYZ& .,-:;'!?

abcdefghijklmnopqrstuvwxyz $1234567890

6, 8, 10, 12, 14 pt. duplexed with Spartan Bold

TEMPO MEDIUM—No. 28M, Ludlow — Slugs

ABCDEFGHIJKLMNOPQRSTUVWXYZ& .,-:;'!?

abcdefghijklmnopqrstuvwxyz $1234567890

14, 18, 24, 30, 36 pt. See also Tempo Medium Italic and Swash

SPARTAN MEDIUM, Linotype — Slugs

ABCDEFGHIJKLMNOPQRSTUVWXYZ& .,-:;'!?

abcdefghijklmnopqrstuvwxyz $1234567890

6, 8, 10, 12, 14 pt. duplexed with Spartan Medium Italic

20TH CENTURY MEDIUM—No. 605, Lanston — Single Types

ABCDEFGHIJKLMNOPQRSTUVWXYZ& .,-:;'!?

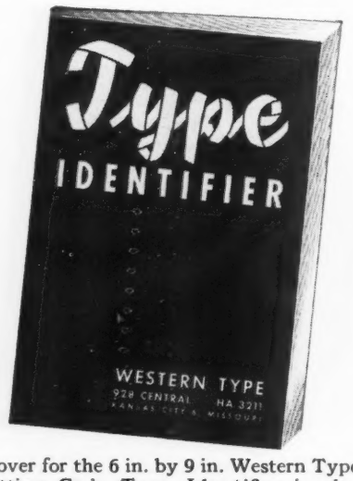
abcdefghijklmnopqrstuvwxyz $1234567890

6 pt²	40A	$1.75	80a	$2.10	$3.85	18 pt²	12A	$2.65	26a $3.05	$5.70
8 pt²	25A	1.15	50a	1.35	2.50	24 pt²	8A	3.40	17a 3.40	6.80
9 pt²	26A	2.70	53a	3.15	5.85	30 pt²	6A	3.70	10a 3.70	7.40
10 pt²	25A	1.70	50a	2.00	3.70	36 pt²	5A	4.75	7a 4.00	8.75
11 pt²	24A	3.15	47a	3.60	6.75	42 pt²	5A	8.35	7a 6.50	14.85
12 pt²	25A	2.60	50a	2.90	5.50	48 pt²	4A	6.35	6a 6.25	12.60
14 pt²	22A	2.85	42a	3.10	5.95	60 pt²	3A	8.50	6a 8.50	17.00
16 pt²	12A	3.30	26a	3.85	7.15	72 pt²	3A	11.50	5a 9.35	20.85
16/18²	12A	2.85	26a	3.30	6.15			See also italic		

Type Identifier

Reduced in size, the original type page shown here measures 28 picas by 45 picas. This page is representative of the arrangement of type faces in Western Typesetting Co.'s new *Type Identifier*. Over 400 different specimen alphabets are shown. "The grouping of type faces by serif characteristics is a little more understandable," explains President Sanford Stuck of Western, "than grouping as Old Styles and Moderns, since there are so many transitional faces." Each type face is identified by manufacturer such as ATF, Bauer, Intertype, Lanston, Linotype, etc. On this page are shown no-serif, monotone, traditional faces of the "Spartan" class. Also indicated is single type or slug class. Font schemes and prices in most cases appear at the lower part of the page.

WESTERN Typesetting Co., of Kansas City, Mo., has published a valuable type specimen book. It is called the *Type Identifier*. The booklet is 6 in. by 9 in. page size and consists of 84 pages. It was published for the use of Western's type font buyers, letterpress buyers and proof buyers. In preparing this comment for our readers, we'd like to quote Western Typesetting's Sanford Stuck with respect to the arrangement of the type showings: "The grouping by serif characteristics is a little more understandable than grouping as Old Styles and Moderns since there are so many transitional faces." The grouping of faces by design or serif characteristic, makes comparison of different versions convenient."



Cover for the 6 in. by 9 in. Western Typesetting Co.'s *Type Identifier* is gloss black with metallic lettering to prevent a soiled appearance in handling.

Face groupings are classified as no serif, sharp serifs, sharp to dull, dull serifs, rounded serifs, square serifs, italics and scripts. Also typewriters, texts, shaded, outline, shadow, inline or tooled, paneled, ornate and stencil, reverse, initials, monograms, and small caps, are grouped separately.

Within a design group the most condensed faces are shown first. Where two faces are approximately equal length the lighter face is shown first. Thus groups are: no serif to full serif; condensed to extended, and light to bold.

The specimens shown are mostly in 14 pt. which gives an idea of relative size and also comparison of length and weight. Alphabets, figures and points are shown which enables one to readily distinguish closely similar faces.

Indexing of various matrix manufacturers' numbers is both alphabetical and numerical. The grouping by serif characteristics, makes faces easy to find if the user knows the name and number of appearance.

To eliminate the confusion of local arbitrary misnomers, type faces are listed as designated by the matrix manufacturers. Designer of the book has labeled each specimen as to type of product, whether single type characters, slugs or faces for reproduction proofs only.

Mr. Stuck tells us "The 50c price of the book is just for appearance. Anybody willing to pay 50c can have one free."

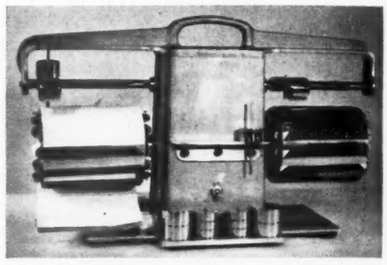
Machine-Cast Type Metals

CASTOMATIC Linotype, Monotype and Mor-Tin replacement type metal alloys in ingot form are announced by Federated Metals Div., American Smelting and Refining Co. Castomatic type metals, states sponsor, are manufactured by casting machines which operate on the die casting principle, modified and improved upon by Federated metallurgists and engineers.

It is explained that in the Castomatic machine developed by Federated, molten metal is contained in a completely closed system from melting kettle to mold. All operations are fully automatic, and each step in the manufacturing cycle is timed to fractions of a second by electronic controls. Thus oxides in the metal are eliminated because the system is closed to air during melting and casting. As a result, dross is reduced when Castomatic type metals are used. Orifices stay cleaner; metal flows more freely.

Further claims by manufacturer are as follows: Uniformity of composition, to a degree previously unobtainable, is possible with Castomatic machines. Chemical tests and photo-micrographs reveal that segregation of the elements, common in tin-lead-antimony alloys, is virtually eliminated in Castomatic type metals. Precisely controlled cooling conditions in the Castomatic system result in unusually fine grain structure and lack shrinkage porosity. Surface appearance is markedly brighter and cleaner than that of hand cast ingots.

Federated announces that Linotype, Monotype and Mor-Tin alloys are being produced in ingots of about 5 lbs. Castomatic Margach bars are being developed and will be available in the future.



Ink Dryograph — An instrument designed for measuring the drying of printing inks has been announced by Everett F. Carman and William F. Huck for inkmakers, papermakers and printers. Sponsor states it will automatically test 24 printing inks on paper at one time. The machine will make a record of these tests for 26 hrs. and has attachments for rub and scratch tests. Additional details may be obtained through *Printing Equipment Engineer*.

Spray Equipment Bulletin

DESCRIPTIVE of both the wet and dry atomizing methods used in pressrooms is a bulletin recently released by Paasche Airbrush Co. The company's range of ink offset prevention equipment is illustrated and described in the brochure printed in two-colors. Specifications and dimensions are given for press mounted, portable stand, and electrically operated compresser units. Copies may be obtained by writing *Printing Equipment Engineer*.

Reproduction Check

Advertisers or agencies now using Wood commercial mats are entitled to a check on the reproduction of copy in any newspaper in the country by a service feature recently initiated by Wood Flong Corp. For example, an agency in New York wishes to secure information as to the reproduction of a client's advertisement in a Houston, Tex. newspaper. The agency can request a regional technical representative of Wood Flong to contact the newspaper and obtain this information direct.

ANPA Mechanical Conference

Greatest Attendance in History, Equipment and Supplies Exhibits Outstanding—Process and Production Papers.

INDUSTRIAL relations again was the major topic for discussion at the first day's sessions of the ANPA Mechanical Conference, Palmer House, Chicago, June 6, 7 and 8. All previous attendance records were broken with 1350 people registered. Nearly 50 manufacturer and supplier companies exhausted available space allotted for exhibits. Aside from the industrial relations part of the program, other outstanding talks were given on Composing Room Operation, Magnesium Engraving and r.o.p. Color Printing. The 1950 conference will be held at Hotel Statler in Buffalo, New York, early in June.

THE Monday morning, June 6 session was opened by John W. Park, Production Manager of the Chicago *Tribune*, who is a member of the ANPA Mechanical Committee, and a former chairman of the committee itself. He first introduced Russ Stewart, General Manager of the Chicago *Sun-Times* who extended a welcome to the mechanical and production executives on behalf of the Chicago newspaper publishers. The next speaker was Edwin S. Friendly, ANPA President. Mr. Friendly expressed interest on behalf of the ANPA for the accomplishments of past conferences.

Conference Objectives

Edwin H. Evers, Chairman of the ANPA Mechanical Committee, and Production Manager of the St. Louis *Globe-Democrat*, was next introduced by Chairman Park. He explained the conference objectives with respect to industrial relations. He referred to the fact that for more than twenty years the ANPA Mechanical Conference has spent much time on technical matters by way of concentrating on production—both in quality and quantity.

"After all," said he, "a typesetting machine capable of producing eight or more lines per min. isn't worth much to us if the desire to set more than three lines a minute doesn't exist in the person sitting at the machine. Maybe we have been paying too much attention to the machines and too little to those operating them . . . Obviously, the subject of getting along with people is important to this group."

Human Element in Industry

The first guest speaker to be introduced was Col. W. F. Rockwell, Chairman of the Board of Standard Steel Spring Co., and of the Timken-Detroit Axle Co. His discussion was led off with a review of some of the men who have made this country great, particularly in an industrial sense.

He reviewed our present economic system and the causes for social discontent. Said he: "The human element in industry is the spark plug which keeps our great vehicle going forward. If it becomes dirty with the soot of socialism, it will slow down our progress, and if it fails completely, it may stop in the path of the tornado of world revolution and destruction."

Industrial Keynote

(From address delivered by H. E. Perkins, Vice President, Minneapolis (Minn.) *Star* and *Tribune*, before ANPA Mechanical Conference, June 1949.)

IF some of us have not been too successful for the past 20 years in dealing with employees collectively, then we must try dealing with them individually, as human beings. This is a return to the employee methods used by our forefathers who built American business as we know it today.

Finally, Mr. Rockwell declared our headaches have been due to imprudent habits, and a change of habits will eliminate the cause which is far more important even if not so instantly soothing.

Basic Qualities of Foremanship

Perhaps the highlight of the entire Monday morning session was the address delivered by A. C. Croft, President, National Foreman's Institute, Deep River, Conn. The topic of his address was *Foremanship Development*. Mr. Croft's address demonstrated a keen understanding of the human element relationship between foreman and employee. Mr. Croft also made some valuable suggestions with respect to management's obligations to the supervisor, as well as to his employees.

In answer to the question, *Why do men work?* he stated men work for financial reward, they work because of the desire for achievement, they work for credit—they want to be understood and appreciated; they work because they want to feel that they belong; men work also because they want leadership; they also work because they want security. Mr. Croft explained that many of the things men work for can be supplied by the foreman. The foreman has a great deal to do with the creation of worker attitude.

Mr. Croft asserted that he is a firm believer in the fact that people do not necessarily need to be born with leadership qualifications; they can be acquired by vigorous and intensive training.

As he sees it, the foreman's job consists of several elements. He is a manager of a business within a business. If he is a foreman in the pressroom, it is his job to meet a schedule, to turn out good quality products, and do so at the lowest cost consistent with his equipment. He also provides personal leadership. He interprets company policies to the employees, and he interprets the employees' reactions to management. He plans working schedules for the individual workers. He handles grievances or gripes. He imparts enthusiasm to his workers, and develops group spirit . . . . He trains workers, new workers on the job and old ones on new assignments. He teaches safe habits, good housekeeping, simple economics; he explains the importance of a good day's work for a day's pay.

Most important, he must like people. No man can hope to succeed as a super-

From Scientific Analysis to Magic—At the conclusion of an analytical talk on newspaper halftone reproduction before the ANPA Mechanical Conference, Palmer House, Tuesday night, June 7, Ben Dalgin, Director of Art and Reproduction for the New York *Times*, provided enjoyable entertainment by presenting an extremely clever magical show. The first part of his magic act was a burlesque of the Xerographic process, which he has named "Nixography". He explained that in the new process, "developed from my own personal research, is employed a powder called A U, (A for atomic and U for uranium)". He baffled the newspaper executives by performing one magic feat after another, each related in some way to newspaper printing. He is shown here holding up "my wife's cake tin" for inspection before enclosing it within a "newspaper printed by A U" and later producing such items as an ice cream cone, pineapple, weiners, a fish, a woman's stocking, silk scarf, etc., from the tin. Of course, the powder used in the "Nixographic" process was magnesium which produced an immediate flare upon contact with flame.

visor or as a leader if he does not like people.

His closing advice to management was: "Make up your mind that foremen are necessary to the operation of your business. Then make those foremen part of your management team by taking them into your confidence, telling them your objectives, your aims and your goals. Make it possible for them to play on the team *with* you, in order to achieve the ends toward which you are all working."

Profits and Our Economic System

In the absence of Benj. C. Bowker, Treasurer of Willys-Overland Motors, Inc., George L. Palmer delivered Mr. Bowker's address entitled *Profits* and *Our Economic System*. Through a graphic display, Mr. Palmer demonstrated what becomes of the money taken in by the advertising and circulation departments. These are fixed charges such as local taxes, insurance, rent and interest, and in this category, 1% of total revenue is consumed. Labor takes 21%. Materials, primarily paper and ink, consume 20%. Sales and administrative sections (editorial, advertising, circulation and business offices) consume 34% of the revenue. Plant and building maintenance requires 3%. Of the remaining money 8% of the 100% revenue goes for Federal taxes. The remaining 13% flows into the residual cash category—that portion of the funds allocated not only to dividends and profits, but the wherewithal for the expansion of facilities.

Combatting Cost Spiral

The afternoon session of the program continued with more discussions on Industrial Relations led by Co-chairmen L. J. Griner, Production Manager, Detroit *News*. *The Rising Cost Spiral and the Need to Combat It* was the title of the first speech delivered by William F. Lucey, Business Manager, Lawrence (Mass.) *Eagle & Tribune*.

Mr. Lucey impressed upon the mechanical and production executives the need for increased productivity and stated that "if we fail, there'll be fewer faces at next year's conference." Since 1929, he stated, at least 706 daily newspapers have suspended publication—one for each 2½ daily newspapers presently publishing. He cited several newspapers throughout the country as examples of publications which suspended operation and left idle more than 200 thousand former employees.

The speaker cited newspapers around the country, both large and small, who are experiencing alarming situations.

Newspapers pay 43% higher wages than the average rate in all American industries, according to Mr. Lucey. In 1947 the typical newspaper employee received approx. $616 in benefits over and above his wages. This hidden payroll represented an average cost of 29½c per hour.

There are just two items in production departments that amount to much and that is newsprint and payroll.

Publishers in both large city and smaller newspapers are now showing an interest in young men trained in industrial engineering. Technical colleges are being asked to include special courses in printing engineering. This is due to the fact that men so trained are cost conscious; have the know-how and are not fettered by damnable customs and indifference.

Employees and Scientific Management

Robert I. Miller, Manager of the Standardization Div., Curtis Publishing Co., followed next with an impressive address on *The Employees' Stake in Scientific Management*. He defined scientific management as being a combination of management techniques that eliminates the waste of misapplied or misdirected human effort, and insures the maximum utility of materials and equipment.

Irritating Practices By Foremen

IN AN address before the ANPA Mechanical Conference, Chicago, June 6, A. C. Croft, President of the National Foremen's Institute, Deep River, Conn., presented a list of irritating practices of foremen which need to be corrected through an orderly process of foremanship development. The purpose of foremanship development, the purpose of which is to achieve better leadership and create better worker attitudes.

"Among supervisors and foremen, we find, for instance," said he, "the Grouchy foreman, who irritates every man with whom he comes in contact. Nothing fires the resentment of a worker more than a cranky, peevish disposition in his foreman. The foreman who nurses a grouch tends to make his men grouchy, and no one likes to work for a sourpuss.

"There is the Dominating foreman—the bossy guy who gets on the nerves of his men. A foreman can exert his authority in such a way that his men do not take exception. Or he can use his authority in a dominating way and stir up the ugliest sort of rebellion in them.

"He can be impatient. Many a foreman who has been through the mill himself forgets, very often, what is reasonable to expect from a man. His impatience becomes a great source of aggravation to his working force.

"There is the Inconsistent foreman—the chap who keeps his men constantly in hot water because he is always changing his position. It is difficult to please him. They never know when he will change his mind.

Another very bad habit on the part of some foremen is the breaking of promises. There is no more certain way for a foreman to incur the ill will of his men than to make promises he cannot or will not keep.

There is the foreman who shows favoritism. What is more aggravating to workers than the foreman who plays favorites, who gives all the easy jobs to his "pets" and the hard ones to the same men over and over again?

The same is true of the foreman who is a gossip—the guy who violates the confidence of the worker. The foreman's job makes him the logical counselor of his workers on many of their problems.

If too much or too little overtime is given to some particular worker, due to poor planning on the part of the foreman, or other conditions which could be controlled by good management, it is going to annoy the working force.

Disregarding or ignoring suggestions for improvement of work submitted by the worker is one way in which a foreman can make it tough for himself. Another way is through withholding credit where credit is due for a good job.

Procrastination irritates workers. Foremen who find it difficult to make up their minds—who put off all the tough decisions until tomorrow—create annoyance and disrespect among their workers.

Under scientific management individuals are united in such a manner as to assure cooperation for the common good, harmoniously, promptly and economically. Without it, you find duplication and overlapping of administration, ineffective coordination and control, too many men reporting to the same executive, and other unsound organizational setups which sap the strength of any enterprise.

Mr. Miller pointed out that it is not unusual to find outdated equipment and poor layout responsible for loss of 25 to 50% in productivity, and poor methods responsible for 20 to 40% unnecessary work. The more effective the control of such factors as planning, scheduling, routing, dispatching and inspection, the more effective will be your production control.

In reference to financial incentive or bonus plans, he said that there still exists, among certain groups, an unfavorable impression of incentive plans which stems from their misuse in former years. Investigations of successful plans show that they have achieved several advantages.

Advantages to the workers stemming from such plans are better working conditions, less fatiguing operations and fewer hazards on the job. Fair workloads, increased earnings, and greater security of employment for most of the workers because of the greater competitive success of their companies.

Miller told the Conference assembly that the reason certain managements have not adopted scientific management is because they lack progressiveness.

Some of the facts of scientific management were pointed out that labor needs to realize. These techniques are aimed at improving working conditions with less fatigue, better scientific methods, highest wages, and fairness to employee in all employer-employee relations.

There is only one way in which we will continue to progress, asserted Miller, and that is increased output per man hour. Those who oppose the techniques of scientific management, oppose the economic advancement of our society.

Dramatic and Gripping Interlude in the Tuesday afternoon, June 7 session of the ANPA Mechanical Conference held at Palmer House, Chicago. At this time Edwin H. Evers presented to Former ANPA Mechanical Dept. Manager Walter E. Wines a DuMont Meadowbrook Television and FM Radio Console. Mr. Evers also unveiled a framed charcoal drawing showing a portrait of Wines with many hands extended, and the words: "Thanks a Million!" The drawing was executed by Don Hesse, St. Louis *Post-Dispatch* artist. The two gifts, (including substantial cash sum), were made possible by small contributions from several hundred newspaper mechanical executives, a number of newspapers, and by manufacturer and supplier companies.

In addressing Mr. Wines, Evers said: "In 1927 a man with vision and courage, pioneered the first ANPA Mechanical Conference at Harrisburg, Pa. Attendance was 83. Average recent attendance at ANPA Mechanical Conferences is 1200. (This year's Chicago conference was 1350). It would be difficult to properly evaluate the good that has resulted from this man's foresight and honest-to-goodness hard work . . . which have brought unlimited benefits to individuals and to publishers of America's newspapers."

Walter Wines responded simply and beautifully. While he talked, there was a pervading hush in the audience. Unaffectedly, he expressed his gratitude for the gratefulness of newspaper and manufacturer associates he has known over a long period of time. It has been said that men don't cry as do women when deeply moved —but several who witnessed the presentation confessed to a tugging of the heart strings.

Reducing Costs—Net Wages

Concluding speaker at the afternoon session was Edward T. Cheyfitz, Assistant to the President, Motion Picture Assoc. of America, who spoke on *Employers and Employees*. The assembled mechanical and production executives were told of the challenge the newspaper industry faces today in a struggle for survival. Over 300 daily newspapers, he reiterated, have gone out of business within the last decade.

"Sooner or later there is going to be an overwhelming pressure to reduce labor costs. Not wages. Reducing these costs will be no small assignment. It will be done through increased productivity."

The output per man hour in the newspaper and periodical field has been falling. A recent report stated that in the period of 1939 to 1945, productivity per man hour dropped 11.3 per cent. The jobs of the employee and profits of the employer will go out the window if productivity does not become the equal concern of both.

Mr. Cheyfitz acknowledged that the ANPA is conducting an intensive research program beamed at increasing output per man hour. He called upon the mechanical and production executives for full utilization of every man's brawn and every man's brain. Brawn was referred to in the sense of a fair day's work.

"If the worker does not produce, the employer does not get the value he should for the wages he pays. On the other hand, if the employee works harder or faster than 'normal' he does not receive full payment for his time—unless he is paid for the extra work through some sort of an incentive pay plan.

Both employer and employee should be vitally interested in this matter of work measurement. Both should be desirous of establishing a fair day's work.

The misunderstanding of work measurement is widespread. That the part played by work measurement is not fully grasped is evidenced by the labor slogan of a *fair day's pay for a fair day's work*. There is no direct relevance between a fair wage and a fair day's work. Wages may vary with economic conditions, union organization, type of industry, plant profit situation, cost of living, and other factors. National productivity may increase wages and what wages will buy. The unit of work, however, should go on indefinitely in the same sense as many other standard measurement. Employer and employee need to understand the role of sound work measurement if they desire ever-increasing productivity.

Fortunately, in much of American industry beginnings have been made on employer-employee work measurement

Robt. I. Miller, Curtis Pub. Co., presented outstanding discussion on Scientific Management.

programs. But these programs succeed only in an atmosphere in which there is strong employer-employee confidence and understanding.

The shop executive or foreman should be interested in the worker, not only as a more effective producer but as a more effective individual. Production does not come from dissatisfied people.

Mass production saves time and money. It lowers costs and increases material living standards. But mass production doesn't build egos, or personalities or individuals. Platitudes will not sell newspapers and neither is it the solid stuff from which lasting employer-employee cooperation is built.

"This much is sure, said he, "all of you in the newspaper industry have a stake in cooperation for increased productivity. These industries that have not kept the productivity pace have fallen by the wayside. New technologies create new industries and the old are pushed aside. That can even hold true for the newspaper business.

ANPA Research
Xeroprinting
Fire Symposium
Composing Room Operation

AT THE Tuesday morning, June 7 session, William Baumrucker jr., served as chairman. He was assisted by Mechanical Committee members B. F. Garrity and Fred W. Schaub. The program was devoted to ANPA Research, Xero-printing, a Fire Symposium and a splendid paper on Composing Room Operation.

C. M. Flint, ANPA Director of Research, presented a report showing what has been accomplished, what is being done, and in general, explained operation of the Research Dept. itself.

Flint said, first of all, the Research Dept. wants to be sure all of the so-called bugs have been eliminated from new processes and techniques before submitting them for use in normal production.

He then enumerated some of the projects. Among them is a mat which requires a minimum of packing. It is reasonably successful. Development, however, still is being continued.

The director also reported that research on an automatic router is completed. Patent protection is being applied for. In present design, the machine will be capable of routing seven 24 in. by 18 in. plates per hr. One man can operate or attend at least four machines.

A study on printability is under way at the Institute of Paper Chemistry, Appleton, Wis. Mr. Flint stated: "From this study we expect to be able to learn why various newsprints do not accept ink in the same manner as other newsprints, and why various areas in the same sheet of newsprint accept ink differently.

The services of Arthur D. Little, Inc. has been engaged to make a study of newspaper mechanical processes, and to advise as to which processes may be subject to controls. The object of this study is to provide a basis from which ANPA Research can proceed intelligently to solve existing mechanical problems.

ANPA Research is engaged in a study of the possibilities of printing from original plates instead of stereotypes. It is promising of the greatest results of the active studies. In considering the use of original plates on the press, the director stated the Research Department is dedicated to the adaptation of already existing press equipment. "One of the goals in this project," Mr. Flint stated, "is a method of preparing the equivalent of an engraved plate in a maximum of 5 min."

Mr. Flint discussed the newly established ANPA Research Laboratory in Easton, Pa. He mentioned working agreements with several equipment manufacturers. He reported establish-

Record Attendance at Twenty-first Annual ANPA Mechanical Conference Brought Together These Newspaper Mechanical and Production Executives pictured in left to right order.

1.—Augustus E. Giegengack, Executive Director, Sixth Educational Graphic Arts Exposition; Al Rosene, Mechanical Supt., St. Paul (Minn.) *Dispatch* and *Pioneer-Press*.

2.—Edward W. Evers, Asst. Production Mgr., St. Louis *Globe-Democrat;* Reg Tranter, Mechanical Supt., Boston *Herald-Traveler;* Vernon R. Spitaleri, Manager, ANPA Mechanical Dept., New York.

3.—H. O. Mohr, Mohr Lino-Saw Co.; A. H. Pruett, jr., Circulation Manager, Charleston (W. Va.) *Gazette;* Henry M. Duke, Mechanical Supt., Charleston (S. C.) *Post-News and Courier;* Peter G. Prassinos, Pressroom Supt., New Orleans (La.) *Times-Picayune* and *States*.

4.—J. Elmer Sawdeen, Pressroom Supt., Minneapolis (Minn.) *Star;* George Bolton, Machinist, South Bend (Ind.) *Tribune;* Louis F. Fries, Production Mgr., Baltimore (Md.) *Sun*.

5.—C. C. Chadwick, Manager, New Orleans Agency, Intertype Corporation; Orel Harper, Production Mgr., Tulsa (Okla.) *World* and *Tribune;* Eddie P. Gaughan, Representative, New England Newspaper Supply Co.; George Woodman, Mechanical Supt., Ft. Worth (Tex.) *Star-Telegram*.

6.—Irvan Darnall, Mechanical Supt., Springfield (Mo.) *News & Leader* and *Press;* Alex Primm, Production Mgr., St. Louis *Post-Dispatch;* Leland Schenck, Secretary, and Vern Williams, Mechanical Supt., both of Topeka Newspaper Printing Co., Topeka, Kas.; Don Shelley, Composing Room Supt., East St. Louis (Ill.) *Journal*.

7.—S. L. Swartz, Mechanical Supt., *Patriot-News*, Harrisburg, Pa.; Frank Parker, Production Mgr., Newhouse Pub. Co., Staten Island, N. Y.; Nicholas Miranda, Mechanical Supt., Jamaica-Long Island *Daily Press;* Fred Travelena, Representative, Charles Eneu Johnson & Co., New York.

8.—J. Wallace Wood, Stereotype Supt., St. Louis *Star-Times;* A. W. Harris, Asst. Night Mechanical Supt., New York *Times;* Edgar Mills jr., President, Eastern Newspaper Supply, Inc.; Thomas McGarry, Composing Room Supt., and L. M. Stoppleworth, Stereotype Supt., both of New York *Times*.

9.—Harold O. Mohr, Mohr Lino-Saw Co.; S. K. Trunnell, Composing Room Supt., Roanoke (Va.) *Times & World-News;* Herman Wedemeyer, Pressroom Supt., Detroit *Free Press;* W. J. Easton, Mohr Lino-Saw Co.

10.—Harold C. Leppert, Asst. Production Mgr., Louisville (Ky.) *Courier-Journal* and *Times;* H. Earle Runion, Production Engineer, Louisville, Ky.

11.—Nicholas M. Fellman, Mechanical Supt., Chester (Pa.) *Times;* George C. Chalmers, Vulcan Proofing Co.; William F. Madden, Composing Room Supt., Worcester (Mass.) *Evening Gazette*.

12.—J. H. Lardin, Pressroom Supt., Cleveland *Plain Dealer;* Don Clark, Stereotype Supt., Grand Rapids (Mich.) *Press;* Joseph P. Dorr, Capital Tool & Mfg. Co.

13.—Sidney R. Weiskittel sr., Pressroom Supt., Cincinnati (O.) *Enquirer;* Sidney R. Weiskittel jr., Press-Stereo Foreman, Norfolk (Va.) Newspapers, Inc.; Earl Weiskittel, Pressroom Supt. Youngstown (O.) *Vindicator*.

14.— R. B. Denton, Machinist, Lansing (Mich.) *State-Journal;* Auburn Taylor, Pressroom Supt., Charleston (W. Va.) *Gazette;* Rock Wales, Composing Room Supt., Lansing (Mich.) *State Journal;* Paul Fite, Stereotype Supt., Charleston (W. Va.) *Gazette*.

15.—W. W. Southam, Executive Asst., Southam Newspapers, Montreal, Can.; John B. Swift, Vice President, Morton L. Pereira & Assoc.

16.—Val Wells, Mechanical Supt., Des Moines *Register* and *Tribune;* Thomas F. Gougarty, Mechanical Supt., Omaha (Neb.) *World-Herald;* Stanley Myers, Asst. Mechanical Supt., Philadelphia *Bulletin*.

17.—D. J. Snyder, Pressroom Supt., South Bend (Ind.) *Tribune;* Arnold Imshaug, President, Alico, Inc.; Jack Parks, President, Cline Electric Mfg. Co.; Robert W. Dickerson, Architect and Engineer.

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ment of a program of technical services to members.

Rotary Xeroprinting

Xeroprinting, a new process for printing rapidly by rotary press but with dry powder in place of ink, was explained and demonstrated by Dr. R. M. Schaffert of Battelle Memorial Institute, Columbus, O. (See November 1948 issue of *Printing Equipment Engineer*.) He was assisted by Messrs. Rheinfrank and Copley, also of Battelle. As is usually the case where the press is operated, the audience seemed fascinated.

Dr. Schaffert explained, previous to the printing demonstration, that instead of ink, a dry powder is used and this is applied to the electrically charged image on the curved xeroprinting plate mounted on the plate cylinder of the press. The powdered image on the xeroprinting plate is transferred to paper by charging the paper electrically as it passes in contact with the image surface. Electrical attraction causes the powder to adhere to the paper. This no pressure is required in exroprinting to obtain a printed impression on paper. The transferred powder is then fixed or bonded to the paper by heating.

Dr. Schaffert enumerated a number of operations needing further research and development: (1) Halftone printing; (2) Better quality solid blacks and heavy headline material; (3) Platemaking techniques; (4) Further development of printing powders for specific needs; (5) Plate wear is an unknown factor. However, since no pressure is involved, no serious difficulties are anticipated; (6) All operational steps need to be more expertly mechanized.

Fire Prevention

Roi B. Woolley, Editorial Director of *Fire Engineering*, conducted a symposium during which a number of speakers warned of fire hazards and the best methods of eliminating or treating them.

The first speaker was Frank McAuliffe Chief, Chicago Fire Insurance Patrol. He reviewed recent fire history in Chicago and commented that paper roll stock is feared by firemen. Paper is dangerous from the standpoint of collapsing buildings. Ignition of residue in color press ducts caused eight fires alone.

Harold J. Burke, Fire Protection Engineer, CO_2 Fire Equipment Co., discussed fire fighting equipment. Included was a discussion on CO_2 or carbon dioxide extinguishers which smother fires locally. This equipment leaves no residue damage to equipment other than in the spot where the fire occurred. He mentioned one installation of CO_2 equipment in a pressroom which was rendered ineffective because someone had removed the baffle plates. Inflammable ink spattered from the pressure of the gas. Localized fire fighting equipment was advocated for fire protection purposes, because sprinkler systems will not extinguish volatile liquids promptly.

Peter Miller, Publisher of the LaSalle (Ill.) *News-Tribune*, discussed the fire which destroyed his newspaper plant in December 1948. He stated that his firm has ordered a sprinkler system for the paper's new quarters. He stated that in his company's case the sprinkler system should pay for itself in reduction in insurance premiums in approx. 5 yrs.

Irvan Darnall, Mechanical Supt. of the East St. Louis (Ill.) *Journal*, discussed the cause and damage of the fire which destroyed the *Journal* plant some time ago. Although the Springfield fire department recorded the cause of the fire as unknown, yet Mr. Darnall thought that the record should read: "Cause of fire—negligence."

He discussed the difficulties in getting out the paper through the cooperation of other newspaper plants. The temporary printing and publishing facilities were used for many months, because equipment manufacturers were far behind with delivery schedules. "At the blackest moment," he said, "communications from manufacturers as well as pubishers literally poured in pledging their cooperation."

Mr. Darnall said that "In the operation of our new plant, we emphasize cleanliness of building and equipment. Our waste paper is hauled away every day. We launder our soiled wiping rags daily. This is done by a janitor in an ordinary home automatic washer and drier. Inflammable type cleaners and solvents are kept in small quantities in approved safety containers."

Saving Man Hours

Don Shelley, Composing Room Supt. of the East St. Louis (Ill.) *Journal*, discussed *Composing Room Operation*. It is evident that many operations have been installed and are kept effective in *Journal* composing room operation which result in operating economies. The *Journal* is in the 50,000 circulation class. Before presenting some of the production practices in effect he explained the *Journal* composing room is producing 85% of a page per 7½ hr. day shift or 7 hr. night shift. Mr. Shelley explained that in this computation is all time put in the composing room by the foremen, proof-

ANPA Mechanical Dept. office group at June Conference, Palmer House, Chicago. Left to right: Vernon R. Spitaleri, Manager; Fred Brickner, Asst. Mgr., and John Lovaglio, Secretary.

Leadership Qualities in a Foreman

IN A foreman development program, every supervisor should practice the seven basic qualities of leadership, the first of which is loyalty, said A. C. Croft, President of National Foremen's Institute, before the ANPA Mechanical Conference, Chicago, Monday, June 6.

Continuing, Mr. Croft said workers admire loyalty in a foreman more than any other qualification. Your supervisor should be loyal in working with his people. He should be loyal not only to his workers, but to his management as well. He should be the one to defend both against injustices.

The foreman should practice courtesy. He should always be a gentleman. Every worker wants to believe that he is of some consequence and he expects to be treated accordingly.

The third qualification of a foreman is cheerfulness. He should like his job, because if a supervisor doesn't like his job, how can he expect his workers to like theirs?

He should be frank. It is not always easy to be frank in discussing relations between management and labor. He should not make the mistake of glossing over situations.

He should be fair and impartial in his dealings with workers. He should not exhibit favoritism in the assignment of work, or in his relations with his working forces.

He should be friendly. Many foremen find it difficult to determine the difference between familiarity and friendliness.

He should have patience—infinite amounts of it—and expend the full capabilities, efforts, hopes and dreams of the men who comprise his working force.

He should be neat, orderly and willing to assume the responsibilities that go with the job.

He should be reliably informed on economic and sociological developments, so that he can properly interpret to his workers business conditions and government regulations affecting company activities.

Today most of the unions have very large research departments. They supply their shop stewards with very complete information on the economic outlook. Unless management does equally well, workers are bound to look to the union for information of this sort when, as a matter of fact, it should come from management.

readers, machinists and every printer and operator. Only men on vacation or sick leave are not charged against this production figure. The *Journal* composing room crew of 34 has handled the total copy output of more than 40 editorial and advertising department employees, plus AP and UP service, plus outside stories, pictures, the ad copy produced by advertising departments of local stores and national advertising agencies. The composing room has produced an average of 135 pages per week in the first 20 weeks of this year.

Mr. Shelley enumerated a number of the practices in effect in his composing room, as follows:

"To hold this production rate we must be on guard constantly against pressures to add costly extra services and demands to the composing room load. One of the worst of these is extra editions which we avoid by printing only one edition daily with an occasional makeover, and only two editions of our Sunday *Journal*.

"Since a newspaper is made up of a vast number of little things, letters, spaces, figures, rules, etc., put together in a systematic and orderly manner, we do not overlook the little things in trying to save time and money.

"Typeface choices in ads are limited to save magazine changes.

"Measure changes in ads are held to a minimum. Half-pica measures are avoided almost entirely. We even attempt to standardize as far as possible on three inside measures of 10, 20, and 30 picas.

"A great deal of hand leading of straight and ad matter is made unnecessary by setting our 7 pt. on an 8 pt. slug, 10 on 12 and 12 on 14 pt.

"Letterspacing of display lines in hand or machine composition is not permitted except in a few ads where the advertisers are known to demand it.

"Shell casts instead of typehigh are used in ads.

"Small ads are tied with Scotch tape instead of string, thereby doing away with the need of untying them when they are placed in the page forms.

"Our news head styles are simple, streamlined and set upper and lower case instead of all caps.

"We use 4 pt. column rule instead of the harder-to-handle, thinner rules.

"Sports scores and radio programs are set in agate but not much else.

"Our equipment includes 11 typesetting machines besides a Ludlow and an Elrod. We use Matrix Contrast Service with the various colors for different fonts. We have recently purchased aluminum galleys and chases.

"To reduce noise a Celotex, sound-absorbing ceiling was put in several years ago. Frivolous visiting, loud conversation and disturbances by outsiders are discouraged in the composing room during working hours."

Immediately following Mr. Shelley's address, a number of interesting questions were asked.

W. R. Coddington, Composing Room Supt. of the Youngstown (O.) *Vindicator*, wanted to know why Mr. Shelley's paper didn't set classified ads in agate instead of 7 pt. Mr. Shelley's reply: "Because we want to make it possible for people to be able to read those ads."

Production Mgr. Bernard F. Garrity of Gannett Newspapers asked: "How do you manage to engineer this wonderful cooperation from the other departments?" Shelley replied: "In a small plant everybody is acquainted—the cooperation just has to be there."

Harry Eybers, Production Mgr. of the Salt Lake City (Ut.) *Tribune* and *Telegram*, asked: "To what extent does your plant dummy, and who does it?" Mr. Shelley stated: "The news department dummies the main stories only, and permits some leeway in the composing room with respect to makeup."

Edw. S. Nagel, Composing Room Foreman of the Champaign (Ill.) *News-Gazette*, asked: "Does the news volume run the same every day?" Shelley replied: "It varies more than I wish. If we have 2 cols. of overset it is killed; if more than that the type can be used later."

Plant Expansion
Color Conditioning
Visual Planning
Preventive Maintenance
The Starstarter

THE Tuesday program was resumed in the afternoon as J. L. Stackhouse, Easton (Pa.) *Express*, T. A. Corcoran, Louisville (Ky.) *Courier-Journal & Times*, and W. B. Pape, Waterbury (Conn.) *Republican and American* presided over the session. Feature of this meeting was a symposium on plant expansion and construction.

John W. Park, Production Manager of the Chicago *Tribune*, was the first speaker on the symposium and related the story behind the new addition to the Chicago *Tribune* plant. "Our objectives", he began, "in the new building were straight line production, enough space for each department to operate properly, good light, good air, ample and clean locker facilities, and proper safety."

Newspaper buildings should be handy to the main business district. It is another advantage to be on a side street to aid roll paper unloading and dispatching of newspapers, and it is desirable to be on a railroad siding. The *Tribune*, he stated, is fortunate enough in having all of these advantages, because someone was far-sighted enough to plan for them.

Mr. Park told the Conference members that the *Tribune's* problem was to plan ideal floor layouts for all departments, with the proper square footage required for each department and the correct relationship between departments.

Straight line production must be preserved. We must plan to aid production and to lower operating costs if we are to continue in business under mounting costs and shrinking margins of profit. We must design so that the utmost in team work is possible.

The *Tribune* has increased the size of our various departments from 30% to 100%. Structural glazed tile is used for cleanliness, brightness, and less costly maintenance in all the mechanical departments. Two combinations of colors are being used for variety. A reddish brown wainscot with buff walls and another of a dark green wainscot with light green walls. Fluorescent lights are employed in nearly all departments as well as end grain wood floors to stand the trucking abuse and still be kind to the workers' feet. Acoustical ceilings are used in the noisy departments such as the pressroom and composing room.

The presses have been installed on springs to alleviate the noise from the pressroom. Two news ink supply systems have been supplemented by a third to handle emergencies.

Harold C. Leppert, Assistant Production Manager, Louisville (Ky.) *Courier-Journal & Times*, outlined the planning that went into the construction of that newspaper's new plant. As one example of the planning, he recalled, dark rooms in the Standard Gravure Corp. (which operates within the plant) were planned to be located over the etching room, so that the water from the dark room tanks

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Foremen Don't Have a Corner

IN discussing some of the irritating practices indulged in by foremen, A. C. Croft, President of National Foremen's Institute, Deep River, Conn., stated that foremen do not have a corner on the market of irritating practices by any means. He was addressing the ANPA Mechanical Conference in Chicago, on June 6. "Very often, in top management brackets, we find men who practice annoying habits that take their toll in terms of worker attitudes," he said. "In this connection I should like to read a set of *Ten Rules for the Witless* or *How To Succeed Without Talent* which you may have read before, but which I think illustrates the point very well:

Rule 1. Study to look tremendously important.

Rule 2. Speak in a deep, resonant voice with great assurance—sticking closely, but not too closely, to generally accepted facts.

Rule 3. Contrive to mingle with important people.

Rule 4. Before talking with a man you wish to impress, ferret out his remedies for current problems; then advocate them staunchly.

Rule 5. Listen while others wrangle. Pluck out a platitude and defend it righteously.

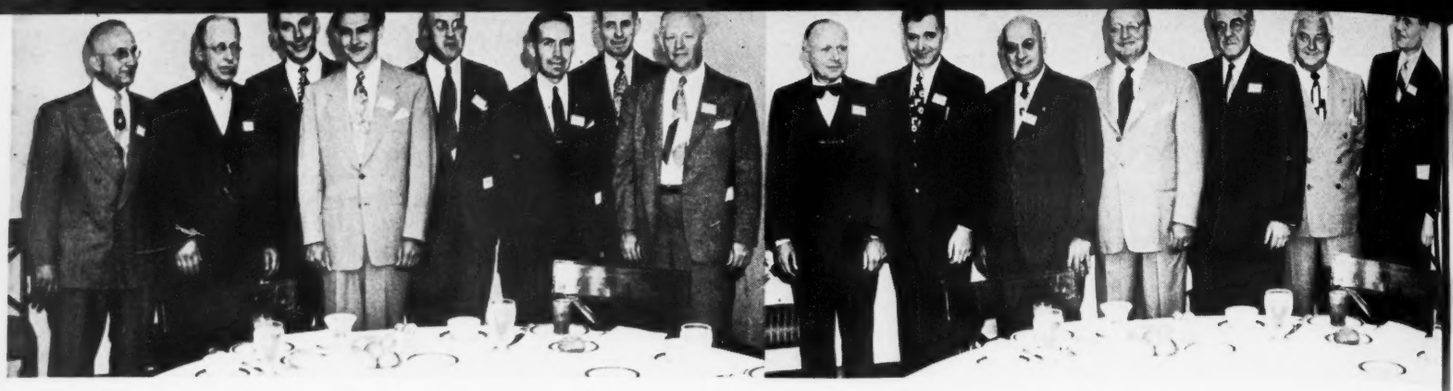
Rule 6. Acquire a capable stooge, but keep him in the background.

Rule 7. In offering to perform a service, imply your complete familiarity with the task—then give it to the stooge.

Rule 8. Arrange to be the clearing-house for all complaints. It encourages the thought that you are in control and enables you to keep the stooge in his place.

Rule 9. Carry yourself in the grand manner. Refer to your associates as "some of the boys in our office."

Rule 10. Walk swiftly from place to place, as if engrossed in affairs of great moment. Keep your office door closed. Interview by appointment only. Give orders by memoranda. Remember, you're a *big shot*, and you don't give a damn who knows it!



ANPA Mechanical Committee Personnel — From left to right they are: Earl Weiskittel, Pressroom Supt., Youngstown (O.) *Vindicator;* Walter E. Wines, retired Manager, ANPA Mechanical Dept.; Leslie J. Griner, Production Mgr., Detroit *News;* Vernon R. Spitaleri, ANPA Mechanical Dept. Mgr.; T. A. Corcoran, Purchasing Agt., Louisville (Ky.) *Courier-Journal* and *Times;* William Baumrucker jr., Adm. Asst. to Bus. Mgr., New York *Daily News,* and Chairman ANPA Research Committee; Wm. B. Pape, Asst. Pub., Waterbury (Conn.) *Republican* and *American;* John Park, Production Mgr., Chicago *Tribune;* Rudolph Lent, Manager, Jersey City (N.J.) *Journal;* Ralph R. Cranmer, Business Mgr., Williamsport (Pa.) *Grit;* J. L. Stackhouse, President, Easton (Pa.) *Express;* Edwin H. Evers, Chairman of the Committee, and Production Mgr., St. Louis *Globe-Democrat;* Edwin S. Friendly, President, ANPA, and Business Mgr., New York *Sun;* B. F. (Bernie) Garrity, Production Mgr., Gannett Newspapers; Fred W. Schaub, Treas.-Business Mgr., Decatur (Ill.) *Herald-Review.*

would help to flush the acids from the etching room through the drains.

When assembly of the new presses and stereotype equipment was complete, an orientation program was set up for the pressman and stereotypers. This enabled them to become familiar with the new equipment, through trial runs, before the move to the new plant was made.

Relating some of the mistakes made in construction, Mr. Leppert referred in one instance to the stereotype department. At present, the JAL-tread floor plates are set on channel irons with spaces between the channels filled with concrete. When the plates were put down there was not sufficient contact between the plates and floor and hollow spaces occurred causing noise when trucks are rolled across the surface. John C. Steele, Stereotype Superintendent at the *Courier-Journal & Times*, thinks it now better to have the steel floor put down and fill up under it with grout to assure a uniform contact with the bottom of the floor plates. This would cut down much of the noise made from the rolling trucks.

Medium daily newspapers were represented on the symposium by R. M. O'Connor, Plant Superintendent of the Warren (O.) *Tribune-Chronicle*. In relating the highlights of the expansion and remodeling program recently completed at the *Tribune Chronicle*, he offered this advice.

"Having engaged an architect to draw exact plans and specifications for a building you should insist that any changes from these plans, either during initial construction or at a latter date, be noted on these plans. I speak from experience, for in our case the drawings of the original building and the drawings of the two additions were combined. From this the addition of the third floor was planned by the architect. There were nevertheless, so many changes made during construction of the original building and subsequent additions that were not noted in the plans, that construction details made by the architect were almost worthless. This fact alone, doubtless increased our costs many thousands of dollars and greatly delayed completion of the project."

Costs of the construction, he stated, more than doubled over the original estimate.

A general discussion ensued after Mr. O'Connor's talk with several architects in the newspaper field and Conference members participating. The architects included John B. Swift, representing Morton L. Pereira & Associates, Robert W. Dickerson, H. Earle Runion, William Ginsberg and Serge Birn. The effectiveness of acoustical ceilings in pressrooms was the subject of a lively debate with several offering their opinions.

Leon A. Link, Production Manager at the Cleveland *Plain Dealer*, asked if ink mist filled in acoustical ceilings. Mr. Park stated that the metal pan type in use at the Chicago *Tribune* does not fill-in. Mr. Ginsberg differed, however, and stated that ink mist does enter sound-proofing material and affects it. The only objective in sound-proofing material is to keep the offices quiet and called it an unnecessary luxury.

Mr. Park was given the floor again and related how tests had been made in the *Tribune's* pressroom before the acoustical ceiling was installed and claimed that it was effective. A reduction of 50% of the noise from the outside in the pressroom of the Birmingham (Ala.) *News & Age Herald*, was claimed by W. L. Knighton, Production Manager, from the installation of acoustical ceiling.

Mr. Dickerson commented that industry is at present experiencing a period of falling construction costs. He forecast to the assembled mechanical and production executives, that this slide will not continue indefinitely nor would its comeback reach wartime proportions. He emphasized that planning was not an operation which can be accomplished quickly and suggested that during this uncertain period, plans for future construction be worked out.

With the conclusion of the symposium, L. S. Oyster, Maintenance Sales Supervisor, E. I. du Pont de Nemours & Co., spoke on *Color Conditioning*. The acceptance by many leading manufacturers of color as an aid in promoting efficiency, increasing production, improving quality, reducing personal injuries and improving employee management relations was explained.

Visual Planning

H. H. Dasey, President of Visual Planning Equipment Co., followed on the speaking program with a talk on *Visual Planning* and told the ANPA members that concrete, factual planning is overlooked by the newspaper industry.

He attacked the complicated blueprints employed in the planning of new plants and departmental layouts. Drawings are only capable of a certain amount of interpretation. There is a lack of engineering planning language which both mechanical and planning people can stand on.

He stated that an average course in visual planning engineering could be taught in 90 days with the usage of an understandable planning language because everyone understands the problem. He then showed the audience a movie employing three dimensional planning of various plants which his company has engineered the planning.

Magnesium

Magnesium in the Newspaper Plant was the topic of the next speaker, P. B. Craighead, President of Magnesium Products of Milwaukee. He reminded executives that magnesium is the lightest structural metal in the world.

Mr. Craighead told the ANPA members of the use of magnesium in the construction of telescopic conveyors for the mailing room at the Milwaukee *Journal*. The outstanding feature of these conveyors, he explained, was their light weight which enables fast and easy movement upon the loading platform. Magnesium, he said, will absorb shock better than steel.

The Starstarter

The Tuesday afternoon session concluded with a talk by A. E. Katz, Production Engineer at the Toronto (Ont.) *Star*. *The New Starstarter and Mailing Room Mechanization* was the subject of his talk which aroused much interest among the mailing room and production executives present.

Mailing room operation at the *Star* were described by Mr. Katz and how that newspaper has strived for straight

ANPA Research Group — William Baumrucker jr., Chairman ANPA Research Committee; Roy Prince, Head of ANPA Research Laboratory, Easton, Pa.; Mrs. R. V. Lang, Secretary to ANPA General Mgr. Cranston Williams; C. M. Flint, ANPA Research Director; Wm. H. Leick, Technical Services, ANPA Laboratory, Easton, Pa.

line movement of materials. The Starstarter, he explained, was a product of the *Star's* Research and Engineering Dept. Consisting of a fixed table and short conveyor, the device cuts and applies the bottom wrapper to a bundle of newspapers, without lifting the bundle.

In telling of its relation to other operations, he said, "the Starstarter bridges the gap between the press conveyor delivery and the mailing room roller slat conveyor, automatically starts the stacks of newspapers and applies the bottom wrapper."

In handling bulk runs, two men "fly" lifts of 25 papers from the fixed table to the conveyor section, which starts the stack forward onto the roller slat conveyor as the bottom wrapper is automatically applied.

Portable counting tables are attached alongside the roller slat conveyor for counted runs. The dispatching mailer sits at the Starstarter and the count mailer stands at his table, facing the Starstarter. The Starstarter is set to semautomatic as the run begins.

The speaker used a bundle of 33 papers as an example. A lift of 25 newspapers is placed on the Starstarter and the dispatcher pushes a control switch to start the stack forward. At the same time he lays the count wrapper in front of the stack. As the stack moves forward, the counting mailer sees the count on the wrapper, and adds eight papers to the moving stack. The mailer further along applies the top wrapper.

In the short discussion which ensued on mailroom operation which followed, Leslie J. Griner, Production Manager of the Detroit *News* asked Mr. Katz how the bottom wrapper was applied to the bundle. The speaker explained that the bottom wrapper comes from a roll of kraft paper underneath the fixed table. The wrapper comes up through a slot in the table and is cut to the desired length by a tripping mechanism.

An extra session was held on Tuesday night, June 7. ANPA Mechanical Committee member Russell Cranmer presided. L. J. Griner, Production Mgr. of the Detroit *News*, was introduced by the chairman. The subject of Griner's discussion was *Preventive Maintenance*. The speaker stressed the necessity for looking to the proper maintenance of the employers' principal investment—the machinery and buildings. The "fix-it-when-it-breaks" philosophy of maintenance has crept into our thinking. He warned his listeners of the strange paradox existing today whereby publishers are faced with all-time peaks in advertising lineage and circulation, and all-time high operating costs. "Net returns are down to the point where management is burning midnight oil trying to cut corners. In some instances, orders for new equipment have been cancelled or deferred for delivery.

In the case of his own paper, Mr. Griner stated that after a survey of the equipment situation it was determined to begin to manage maintenance. The equipment had been permitted to run down.

It has been a prime objective at the Detroit *News* to sell the maintenance force the idea that its first duty is to conduct its maintenance program so as to avoid breakdowns of equipment. In other words, maintenance in the plant is being managed. There is no waiting for the equipment to break down. A scheduling system is being employed.

Mr. Griner stated that the four cardinal points of a preventive maintenance system are: (1) Inspect, (2) Lubricate, (3) Service, and (4) Clean—all according to a predetermined schedule.

"Managerial executives," said the speaker, "are realizing more fully the vital part maintenance plays in plant operation. In many plants maintenance has long been a respected function. Adequate budgets based on actual needs and

(Continued on Page 38)

Sound Personnel Program Needed

(Summary of address delivered by H. E. Perkins, Vice President, Minneapolis (Minn.) *Star* and *Tribune*, before ANPA Mechanical Conference, June 1949.

OPERATION of the personnel program at the *Star & Tribune* was explained by Mr. Perkins to show the mechanical and production executives that such a sound program is beneficial to a newspaper's operation.

Labor relations and personnel problems were distinctly divided in explaining the functions of each. He named labor relations as those relations with the group and personnel services as those services affecting the individual. Despite this distinction, he asserted they are closely related.

In discussing employee services at the *Star & Tribune* he stated that no other business is so dependent on people for success as is the newspaper business. We try to employ above-average people in Minneapolis and try to get above average cooperation. Though the personnel department still carries out the usual functions, the final selection of a new employee is always up to the department head. The personnel department only makes recommendations.

The *Star & Tribune's* personnel department assists the department superintendent by taking care of all the paper work necessary to place the employee on the payroll and then performs numerous duties. These include explanation of the hospitalization program, life insurance, physical examinations, Girls Club, Employees' Credit Union, employees cafeteria, etc.

Personal counseling is another function of this department. Perkins remarked that "our personnel department is preparing to conduct a supervisory training program in which we will try to make sure our supervisors understand company policies, as well as understand human nature."

He pointed out that two necessities are required in personnel work. One is to have a successful personnel department that top management must want and understand. No personnel department can function successfully unless top management supports it and recognizes both its need and its advantages. The other is a personnel department that is a service department. It must serve all other departments, but must not run the newspaper.

Loyalty to the employees was given as the answer to the harmony enjoyed by the *Star & Tribune* in labor relations. The individual employee appreciates considerations shown him. The sourest employee in your plant will smile if you help him to smile. You have to know him, and you must encourage him to talk.

(*Continued from Page 37*)

experience must be provided. Management's stake in well maintained equipment is growing greater by the day. As wage scale rates and the cost of new equipment go up to new highs, so does the cost of losses caused by breakdowns and equipment failures."

Magnesium Engraving

An informative and interesting discussion about the use of magnesium for photoengraving in the plant of the Miami (Fla.) *Herald* was presented by R. R. Lilly, Photoengraving Supt. The speaker quoted from a recent issue of the ANPA Research Bulletin in which it was stated that more than twenty newspapers are using magnesium successfully for engraving purposes. Among the qualities pleasing to the speaker are ease of handling on account of light weight, returning to its original flat condition after it buckles when heating over gas stove after powdering the bottom comes clean with practically no brushing.

He explained that, due to rapid dot reduction in etching, a slightly larger highlight dot is desirable in the negative. For most city waters, installation of a water softener system is a must. Tank heating is almost a necessity—temperatures of well over 200 deg. are being used successfully. Printing time is shorter than for zinc. It is recommended that acid half the strength of that for zinc be used.

Mr. Lilly asserted the *Herald* has found it can meet deadlines with a greater margin of safety than is the case with zinc.

The speaker described a time study which he had made in the production of a full page line engraving on magnesium. He broke down the time elements involved in the production of the page magnesium plate, from the placing of the copy on the copy board of the camera to completion of the plate. The complete expenditure of time in the etching room for the full page flat of magnesium, (0.030 in.) etching depth. 18 min. and 10 sec. The total time from copyboard to plate by the same engravers a few days later was 43 min. and 35 sec.

Lilly informed his listeners: "Our etchers regularly turn out flats of 0.030 in. to even over 0.040 in. etching depth in from three to five powder bites, depending upon the coarseness or fineness of lines, and size of benday and dropout highlight halftones."

He believes the day is rapidly approaching when a photographically reproduced printing plate will be made in much less than half the time now required.

Preparation for Reproduction

Concluding speaker on the evening program was Ben Dalgin, Director of Art and Reproduction, New York *Times*. He chose as his subject *Copy Preparation for Newspaper Reproduction* and showed with the aid of slides the effects of a photograph made into a halftone. Someone, he asserted, must assume the responsibility for halftone printing whether it is the photographer, engraver, stereotyper or pressroom. The results of a good halftone reproduction should come from all these sources by team work.

Photographs should be rejected that have excessive shadows, over features and details. Other causes for rejection should stem from photographs that have excessive blacks, light objects placed in a field of white, and those having poor backgrounds such as black on black and white on white.

He said that when a bad photograph is received, one of four courses can be used in preparing that copy for the best reproduction. The first is to request another print. If the negative is not available, they can ask for a new photograph to be taken. If the subject is no longer present, they can have the photograph re-copied. The last alternative would be to have the photograph retouched.

The speaker reminded the Conference members, not to expect miracles from retouching. An ideal newspaper halftone is a reproduction of a photograph that can hold all the middle tones.

After completing his discussion on newspaper half-tone reproduction, Mr. Dalgin introduced to the audience a new process which he said was developed by "personal research." In the process, he employed the use of a powder called AU. A, he explained, means atomic, and U means uranium. The powder, (magnesium) worked many amazing tricks before the burlesque of Xerography was concluded. He named the process "Nixography". Newspaper executives were highly amused as the sober speaker transposed himself into a clever entertainer.

The last item on the Tuesday night, June 7 portion of the program was the presentation of a sound movie entitled *Modern Photoengraving* by the Eastman Kodak Co.

Pressroom Operation
Worn Clips-Clipways
Newsprint Waste
ROP Color
D.-P. Molding

AT THE Wednesday morning, June 8 session, Earl Weiskittel presided. The first speaker introduced was Horace Parker, Press-Stereo Foreman, Richmond (Ind.) *Palladium-Item*. Mr. Parker advocated the keeping of records for the pressroom. Each roller should be stamped with a number. The roller record should show when each roller was cast, reground and the length of service on the press. Other records should include parts replaced, maintenance costs, waste reports, blanket history, newsprint and ink consumption. A card file on personnel is also useful.

He commented that some pressrooms are troubled with dirty conveyors after they have been idle a few days. He knows of one paper that uses Tornado 1 h.p. vacuum cleaners on all black presses. It also has a vacuum system on the folder slitter on two presses. While the system reduces the amount of dust around the folder, it requires quite a bit of attention.

Worn Clips and Clipways was the title of the address delivered by R. N. McKechnie of John McKechnie Tool and Machine, Ltd., Toronto, Ont., Canada. Mr. McKechnie explained that he was not in the newspaper business proper. He became interested in reconditioning press cylinder clips and clipways as the result of a request of Production Manager J. N. Harrison of the Toronto *Globe* and *Mail*.

Some of the causes of worn clips and clipways are uneven type impression, smudgy printing, blurred halftones, plate

(*Continued on Page 54*)

Exhibits

at ANPA Conference

NEARLY 50 equipment manufacturers and suppliers displayed equipment and supplies at the 21st Mechanical Conference of the American Newspaper Publishers Association. A large exhibit hall of Chicago's Palmer House Hotel was filled to capacity by the numerous exhibitors. Newspaper mechanical and production executives representing dailies from every section of the country and Canada, found the three-day exhibit much to their liking.

Acme Press Blanket Co. exhibited cork, oil-proof synthetic rubber, and combination of cork and synthetic rubber press blankets. M. M. Shultz, Sales Manager, was in charge.

Carl G. Bingham, President, and Don E. Crews, Vice President, were the principals at the **Sam'l Bingham's Son Mfg. Co.'s** exhibit. Outstanding was the firm's electrically operated board of a large relief map of the United States. Employing the use of colored lights and an automatic timer, it showed the location of Bingham factories and sales territories throughout the country.

Bourges, Inc., presented Colotone and Solotone sheets, and showed examples of their use in national newspapers and magazines. Explanations of the process were given by Albert R. Bourges and Mrs. Jean Bourges Mayfield.

J. Wesley Lee, Vice President, and Joseph P. Szymas, Foreman of the factory printing department, were found at the **Challenge Machinery Co.** booth. The Challenge Proof Press designed for pulling full-page newspaper proofs locked in stereotype chases, and the Challenge Proof Press with a power-driven ink mechanism, were shown.

A new temperature controlled Darkroom Sink was the feature of the exhibit displayed by **Chemco Photoproducts Co., Inc.** The large Chemco representation was in charge of Sam B. Anson, jr., General Sales Manager. A display board showed Chemco roll and strip film, as

well as a lighted diagram of the sink's operation. A copy board and infra-red burning-in oven and cooler completed the exhibit.

The 16 in. by 20 in. Process Darkroom Camera was featured at the display of **Consolidated Photo Engravers Equipment Co.** Benjamin Sugarman, President, headed the company's representatives in explaining a Radial Arm Router and the 31 in. Precision Camera.

The Fairchild Photo-Electric Engraver composed **Fairchild Camera & Instrument Corp.'s** operating display. Dudley B. Hollister, Sales Manager, headed the firm's representatives explaining the machine's operation to ANPA members. Newspapers containing examples of Fairchild engravings were distributed.

Questions concerning Castomatic Type Metals were answered at the booth of **Federated Metals Div., American Smelting and Refining Co.** A. E. St. John, Advertising Manager, explained that Castomatic is a process for casting metal in a completely closed system.

Using *A Drive for Every Press* as a theme, the exhibit sponsored by **General Electric Co.** covered that firm's latest developments in a.c. and electronic drives for printing presses. William V. Gough, Manager of Printing Equipment Sales, directed the company's large delegation.

A. T. Vanderlinde, Sales Manager, and A. L. Vanderlinde, Manager of the Technical Department, **Hammond Machinery Builders,** headed the Hammond delegation. Featured was the Hammond Full Newspaper Page Base Shaver. Also shown were the Hammond Trim-O-Saws, EasyKasters, Radial Arm Router, and the Glider Stereotype and Composing Room Saws.

Ideal Roller & Mfg. Co. was represented at the exhibit by C. W. Gleason, Field Service Engineer, and Roy Newell, Representative. Ideal's feature was a revolving display of various rollers for newspaper, lithographic and letterpress presses.

A large display of newspaper mastheads from every section of the country representing newspapers served by **Imperial Type Metal Co.** appeared at the company's booth. Clarence Seaman, Vice President, and Claude E. Purkis, Chicago Manager, headed the large Imperial representation.

Kellogg Type-O-Writer keyboards for Linotype and Intertype operation were exhibited by **Kellogg Switchboard & Supply Co.** Geo. Leyser, Representative, explained the keyboard's operations to interested mechanical and production executives.

C. M. Kemp Mfg. Co. displayed photographs of Kemp gas-heating installations in various newspapers. Edward J. Funk jr., Vice President, Earl Genn and Fred Logan, Representatives, composed the firm's delegation.

Lake Erie Engineering Corp.'s booth featured a display board on the 800 T. and 1000 T. Directomat for direct pressure molding of stereotype matrices. The exhibit was under the direction of J. V. Landau, Sales Manager of the Printing Equipment Div.

Plastictype plates were featured at the display of **Lake Shore Electrotype Co.** Frank Reilly, President of Lake Shore, headed the firm's delegation.

A demonstrating model of a Quadding Attachment for line-composing machines was the center of attraction at the exhibit sponsored by **Linotype Parts Co., Inc.** M. Van McKee, Vice President and Manager of the Kansas City Branch, and Emil Bendow, Sales Manager, were among the company's representation.

John O. King, Sales Manager of **Ludlow Typograph Co.** was in charge of that company's exhibit. Visitors were shown Ludlow and Elrod forms made up and locked in stereotype chases.

Magnesium Products of Milwaukee was represented by P. B. Craighead, President. On display was a newspaper page truck on casters, constructed of magnesium and weighing 48 lbs. Also shown was a 3 ft. by 10 ft. Magnesium Mailroom Table weighing 195 lbs. Enlarged pictures of magnesium loading conveyors with telescopic sections were exhibited.

J. B. McKechnie, President, and R. M. McKechnie, Vice President, had some interesting photographs and diagrams at the exhibit of **John McKechnie Tool & Machine, Ltd.** They explained their company's method of refinishing clipways and rebuilding worn clips and clamps on newspaper press cylinders.

Of much interest to the newspaper mechanical and production executives was a Bale and Paper Roll Hand Lift Truck at the exhibit of **Melooz Mfg. Co., Inc.** Ben Hooz, President of the firm, explained the truck's operation.

A live display was sponsored at the exhibition by **Mergenthaler Linotype Co.** New features on Linotype models were explained by members of Mergenthaler's Product Research and Development Dept. The exhibit also featured a demonstration of Linolized molds and spacebands. Heading Mergenthaler's large representation was H. W. Porte, Director of Sales.

A complete line of Glidden Type Metal was displayed by **Metals Refining Co.** Heading the Glidden representatives was W. C. Roddy, General Sales Manager. Of much attraction was an hour glass used to signify the fluidity of metal.

Minnesota Mining & Mfg. Co.'s exhibit was headed by E. J. Kane, Sales Manager. Results of direct comparison tests made at the New York *Daily News* using Sperekote, glass-beaded drawsheets, were displayed.

Monomelt Co., Inc., introduced a new model Plane-O-Matic to the ANPA members. Heading the firm's exhibit were W. H. F. Thompson, Vice President, and George B. Bickelhaupt, jr., General Manager.

George F. Morrison, President of **The Morrison Co.,** presented the Model A-3 Saw Trimmer. A feature of the machine is that it is mounted on wheels. Also of much interest was the Morrison Plate Beveler and Slug Stripper.

E. A. Olson, Assistant to the Advertising Manager, directed the exhibit sponsored by the **National Lead Co., Blatchford Branch.** Featured was the Blatchford Honeycomb Base for rotary press cylinders. The firm's full line of metals were also shown.

In operation at the exhibit sponsored by the **Nolan Corporation** was the Meltavator, a 2 T. metal melting furnace with automatic dump lift. The firm's representatives under the direction of W. A. Nolan, Assistant Treasurer, also showed hand proof press, mat molder and page lift truck.

John Schultheis, Sales Manager, was in charge of the exhibit for **nu-Arc Company.** ANPA members were shown the N-110 Arc Lamp mounted on wheels and motor driven.

F. S. Young, President, and S. W. Poore, Secretary-Treasurer, composed **Pioneer-Toledo Corp.'s** representation. The firm's exhibit was the initial showing of the Pioneer Foot Feed Paper Driller and a heavy duty Bench Router.

A motor driven Arc Lamp, vacuum printing frame, and the ATF Lens-O-Matic, were all exhibited by **Harold M. Pitman Co.** Representing the company were H. T. Holsapple, Sales Manager, and Joseph Meyer, Representative.

Printing Equipment Corp. was represented by Joseph D. Goggin, who exhibited equipment made by this firm. Adjustable form tables and stereotype chases were shown to the newspaper mechanical and production executives.

Copies of **Printing Equipment Engineer** were passed to newspaper mechanical and production executives at *Printing Equipment Engineer's* booth. Conference Registration Lists were also distributed under the direction of Don Will, Publisher. The registration lists were produced jointly by the Chicago *Tribune* and *Printing Equipment Engineer.*

The exhibit sponsored by **J. A. Richards Co.** was in charge of Paul A. Richards, Sales Manager, and Robert E. Richards, Assistant Manager. Featured was the Multiform Router and the Electromatic Plate Mortiser.

R. R. Robertson Co. exhibited a new Darkroom Prism Camera under the Direction of Secretary D. D. Robertson. Robertson representatives also showed a new Zinc Etching Machine. A 24 in. by 14 in. Camera completed the display.

Rolled Plate Metal Co. showed the complete Zomo and Zomag of magnesium and zinc products. Fred Dirkes and Patrick J. Kearns showed newspaper halftones made on Zomag magnesium alloy plates.

The **H. B. Rouse & Co.** display was headed by Harry W. Knoll, President of the company. Featured was a Rouse Band Saw with a new drive and mechanism. Three Rouse Power Miterers of varying sizes were also shown.

A full line of stereotype equipment was displayed by the **Sta-Hi Corporation.** Craig C. Baker, President, John J. Nolan, Service and Sales Representative, and Leland H. Satre, Engineer, composed the Sta-Hi delegation. A miniature model of a composing room form file, attracted much interest.

The automatic matrix molding and space-packing press manufactured by **Stereotex Machinery Co.** was ex-

plained at the company's booth. Charles Fritschi, General Manager, was in charge.

A 9 in. by 12 in. Automatic High Speed Cylinder Press was in operation at the exhibit of the **Stoessel Machine Mfg. Co., Inc.** In charge of the display was William Stockinger, Representative of the company.

A new system of drop-out incorporated for color reproduction was explained at the display offered by **Teaneck Chemical Co., Inc.** In charge was John Grahamer jr., President, who also showed the firm's line of photoengravers' chemicals.

Among the live displays was that of **Teletypesetter Corporation** whose large representation was headed by Frank B. Foster, Sales Engineer. Center of attraction was a Teletypesetter operating unit in operation on an Intertype. The exhibit also included a Standard Perforator, Multiface Perforator, and a cut-away operating unit showing the mechanical details.

Tingue, Brown & Co. exhibited a display board of various press blankets. J. W. Foster, President, Gilbert G. Sanborn, Vice President, and M. J. Doyle, Vice President, were among the firm's large delegation.

Vandercook & Sons, Inc., displayed a Block Leveler and the Safe Electric Galley Proof Press for high speed galley proofs. The Vandercook exhibit was in charge of Fred O. Duensing, Sales Manager.

Bill Warfel exhibited a combination machine for beveling, flushing and block trimming. Also featured was a die press for mortising zinc, copper, electros and plastic plates.

Western Newspaper Union demonstrated equipment manufactured by Hamilton Mfg. Co. and Hammond Machinery Builders. E. C. Kehe, Sales Manager, directed the exhibit in which was also featured the first showing of Hamilton color for equipment—a gun metal grey.

I. Tornberg, Vice President and Sales Manager, was in charge of the **Wood Newspaper Machinery Corp.'s** exhibit. Displayed was a pneumatic pumping system for the Junior and Pony Autoplates. This system for the Pony Autoplate was shown for the first time to newspaper mechanical and production executives.

EXECUTIVE Ⓘs

Appointment of Ren R. Perry to the newly created position of General Sales Manager, Harris-Seybold Co., has been announced by H. A. Porter, Vice President in Charge of Sales. Perry joined the general sales office of the firm in 1926

Ren R. Perry, appointed General Sales Manager for Harris-Seybold Co.

and was transferred to New York as a sales representative. He was next placed in charge of Harris Press sales in the New England area until 1934. Later he took over the management of the company's Used Machinery Div. In 1944 he was appointed Assistant Manager of the Western District and became District Manager in 1946. Perry will be located at the company's general offices in Cleveland.

The appointment of James H. Goss as Manager of Engineering in the Control Divisions of General Electric's Apparatus Department was announced recently by K. R. Van Tassel, Manager of the Control Divisions. Goss graduated from the University of Arkansas in 1930 and entered G-E as a student engineer in 1931. In May, 1947, he was appointed Assistant Division Engineer in the Control Engineering Division, and in December of that year was promoted to Assistant Manager of Engineering.

Fred B. Asdel, jr., formerly Manager of the New York Agency of Mergenthaler Linotype Co., has been named Manager of the company's Pacific Coast Agency at San Francisco, succeeding Harry W.

Fred B. Asdel, jr., appointed Manager of Pacific Coast Agency for Mergenthaler Linotype Co.

Porte, who was recently made Director of Sales. Edward D. Betts, formerly of the Executive Sales Dept., was appointed Manager of the New York Agency, suc-

Edward D. Betts, named Manager of Mergenthaler Linotype Co.'s New York Agency.

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ceeding Mr. Asdel. Prior to his new appointment Asdel was a production engineer for Mergenthaler in California and Arizona. Betts served as a production engineer for Linotype in Pennsylvania and most recently has been manager of the company's Service Dept. He also formerly served as head of the technical division of the company.

The appointment of George M. Baumann as Purchasing Agent and Assistant to the Plant Manager was announced recently by Carl J. Gross, Manager of the Whiting, Ind. plant of Federated Metals Div., American Smelting and Refining Co. Mr. Baumann, a metallurgical engineer and a graduate of Columbia University, has for the past three years been Assistant to the General Manager of Scrap Purchases at the company's headquarters in New York. He has been associated with Federated since 1936 in various capacities and localities.

Frank X. McCormick, Manager of ATF Sales Corp.'s Cleveland branch, has been elected President of the ATF Honor Club, organization of the firm's top salesmen for the second successive year. Mr. McCormick's branch achieved the highest overall dollar volume sales of printing machinery and other heavy

Frank X. McCormick, elected President of ATF Honor Club for second year.

equipment, in relation to the total number of accounts in the territory. Gerard H. Dolliver of the Boston branch, the salesman receiving the greatest number of points, was named Vice President, and Dorsey E. Biggs, Atlanta, Ga. branch, salesman with the second highest number of points, is Secretary. The following salesmen with the next six highest number of points were elected directors: Kenneth H. Gage, Cleveland; Robert E. Steel, Atlanta, Ga.; James P. O'Connor, Philadelphia; Walter J. Guise and Herbert A. Zimmer, New York, N. Y., and Henry F. Krumm, Cincinnati, O.

Michael J. P. Hogan, who has represented the New Products Div. of Beveridge Paper Co., in New York, N. Y., New Jersey and Philadelphia, is taking a leave of absence to serve the U. S. Government as a labor adviser under the Economic Cooperative Administration. Mr. Hogan is scheduled to fly to Paris on July 18 for a several-week schooling in diplomatic procedure, after which he will represent the U. S. Government as a labor adviser in Norway and Denmark. Sales Manager Rollo S. Lewis of Beveridge, stated: "We hate to lose Mike but are proud that he has been picked for this duty." Mr. Hogan expects his appointment to last until January 1951. While he is away, Mr. Lewis and William Pezdirtz will cover Mr. Hogan's Territory.

R. Hunter Middleton, Director of Typeface Design, Ludlow Typograph Co. was the recipient of an honorary degree of Doctor of Fine Arts from Transylvania University on June 6 in Lexington, Ky. The diploma which was presented to Dr. Middleton has Graphic Arts interest since it was designed and executed by his friend, Victor Hammer, Artist-in-Residence at Transylvania University. The calligraphy of the diploma is written in the Uncial hand, the model for Hammer's American Uncial type, beautifully written in black and burnished gold. Dr. Middleton was also honored by the Society of Typographic Arts at a testimonial dinner held June 9 at the Morrison Hotel in Chicago. The certificate of Honorary Membership was presented by the Society's President, Walter Howe, Director of Typography, R. R. Donnelley Sons & Co. Dr. Middleton's service to the Society extends back to its founding in 1927.

R. H. Middleton, Director of Typeface Design, Ludlow Typograph Co., who received honorary degree.

A. H. Burns Retires

Arthur H. Burns retired on July 1 after serving the New York *Herald Tribune* as Mechanical Supt. for the past 26 years. In 1922, he was Supervising Engineer for Lockwood Greene & Co. on the construction of the building for the New York *Tribune*, Inc. Mr. Burns was appointed to the superintendency upon completion of the building. He has been a member of the ANPA Mechanical Committee for 20 years and was committee chairman for 2 years. He was also Vice Chairman of the Publishers Assoc. of New York City for a number of years.

Elmer Z. Taylor, founder of the Mono Service Co., acquired by Continental Can Co. in 1944, passed away at his home in East Orange, N. J., May 20. Up to the time of his death he had served Continental as a consulting engineer. Essentially an inventor, he is responsible for such developments as rotary cutters to make business cards and automatic paper bag-making equipment. He also designed folding box machinery. In 1905 he designed multi-color printing equipment while in England. He is survived by his widow, Mrs. Beatrice Swann Taylor, two brothers and a sister.

Ted C. Snell recently has been appointed Supervisor of Service in the Midwest area for the Printing Machinery Div. of the Electric Boat Co., according to an announcement made by C. A. Harwood, Midwest District Manager. Snell has served for two years in the Midwest area as an erector and service representative for EBCO. Prior to this time, he was chief test inspector at the company's Groton, Conn. plant and has served with the Harris Seybold Co. as tester and service man. Snell's headquarters will be the Printing Machinery Div.'s Chicago office.

Ted C. Snell, appointed Midwest Supervisor of Service for EBCO.

Melville C. Cole, President and General manager of the Southworth Machine Co., cuts an anniversary cake marking 40 years of service with the concern, as Max Serlick, Assistant Vice President and Purchasing Agent, looks on. Southworth employees presented Mr. Cole with a power lawnmower.

Elects Giegengack

At the annual stockholders meeting of the Lanston Monotype Machine Co. held in Alexandria, Va., on June 23, Augustus E. Giegengack was elected a member of the Board of Directors. Nine other directors were re-elected at the same meeting. Mr. Giegengack, who was Public Printer of the United States from 1934 to 1948, is currently General Manager of the National Graphic Arts Expositions, Inc., which is sponsoring the Sixth Graphic Arts Educational Exposition to be held in the International Amphitheatre, Chicago, September 11 to 23, 1950. While in Chicago, Mr. Giegengack maintains headquarters at 105 West Monroe St., and resides at the Lake Shore Athletic Club.

New York Branch

Recently opened by Consolidated Photo Engravers Equipment Co. in New York is its branch consisting of a plant, sales offices and display rooms. The formal opening ceremonies which took place on June 28 to July 2, included demonstrations of the dry plate graining process, System Lindmark, and the automatic self-inking and dampening Offset Proofing Press. Benjamin Sugarman, President of Consolidated, stated that the new branch is equipped to service and repair equipment for lithographic, photoengraving and rotogravure plants. Address of the New York plant and office is 205 West 19th St.

To Standardize Terms

Standardization of printing ink terminology is the aim of a Technical Committee on Printing Inks sponsored by the American Society for Testing Materials. At a recent meeting of manufacturers and users of printing ink, consideration was also given to the need for standard test methods applicable to the evaluation of printing inks and materials used in their manufacture.

Appointed as a steering committee for the research project were: A. C. Zettlemoyer, Chairman, National Printing Ink Research Institute, Lehigh University; G. L. Erikson, Braden Sutphin Ink Co.; M. S. Kantrowitz, U. S. Government Printing Office; E. O. Ryan, Curtis Publishing Co.; and Bernard J. Taymans, Printing Industry of America, Inc. A representative of the newspaper publishing industry will be added to the committee.

ITCA Convention Plans

Arrangements are nearing completion for the 30th annual convention of the ITCA to be held at the Hotel Statler in Boston on September 22, 23 and 24, according to a recent announcement by Frank M. Sherman, Secretary and Executive Director. Business sessions will be featured by talks on matters of general interest to the trade. Included will be a review of new methods and processes for putting words on paper and an executive session at which labor matters will be discussed. Visits to the commercial composition plants in Boston are also scheduled.

Those attending adjourned session of the Photoengravers' Clinic at Pacific Mechanical Conference. The regular meeting lasted two hours assigned time. Afterwards this group got together for a three-hour session. Left to right, they are: L. D. Nesbit, Acme Engraving, Los Angeles; Lonnie DeLavallade, Engraving Foreman, Los Angeles *Times;* E. G. Hedlund, Engraving Foreman, Klamath Falls (Ore.) *Herald-News;* Johnson Owen, not registered; Jos. A. Donahue, Engraving Foreman, Yakima (Wash.) *Republic-Herald;* Harry M. Crosby, Eastern Graphic Arts Supply; J. J. Webb, Engraving Foreman, Seattle (Wash.) *Times;* Lloyd Bjelland, Engraving Foreman, San Francisco *Call-Bulletin;* Chairman Roger Hicks, Engraving Foreman, Los Angeles *Daily News;* Sam B. Anson jr., Sales Mgr., Chemco Photo-Products; Clarence Hedlund, Engraving Foreman, Los Angeles *Herald-Express;* Archie Nowland, Sales Representative, California Ink Co., Los Angeles.

Pacific Mechanical Conference

THE thirteenth annual meeting of the Pacific Newspaper Mechanical Conference was held in Hollywood, Calif., May 20, 21 and 22. Delegates came from the four corners of the district and Hawaii and British Columbia, Can. This conference is the largest district gathering and many of the delegates travel thousands of miles to attend. E. H. Roberts, Mechanical Supt., and P. L. McIlree, Vice President, of the Honolulu (Hawaii) *Star-Bulletin*, came in on the Clipper. Joe Corey, president of the Northwest Mechanical Conference was present. There was a registration of 405.

H. G. Palmer, Publisher of the Hollywood (Calif.) *Citizen-News*, was introduced by President Harold Winn and made the delegates welcome. Mr. Palmer, in turn, introduced Lowell E. Jessen, President of the California Newspaper Publishers Association, who was the main speaker. The subject of his talk was *Printing Ideas Rule the World*. He went back in history and told of the trials of the early publishers.

"In the last 25 years practically every department of the newspaper has undergone drastic transition. Circulations grew faster than ever before, with editors finding more and more responsibilities resting upon their shoulders.

"Now many of us wonder if the composing and press rooms aren't going to look a lot different sometime in the rather near future.

"Naturally, we don't know what's coming in the new methods of printing, but we are sure of two things. First, changes are inevitable in printing as they are in other fields of human endeavor, and secondly, those changes will increase the opportunities for progressive and competent composing and press room employees. But what does all this add up to? Simply this, that no one department is the whole newspaper.

"The newspaper is a composite of many people, doing many specialized jobs. It is a service, an invaluable service, to the community. It tells when meetings are called, and where. It tells how to spell our neighbor's name, and when his daughter was married. It tells your wife about her sewing club, and where to save a penny or two on a T-bone steak. It tells you where the fish are running, and where to find a job."

Officers for Pacific Newspaper Mechanical Conference — (left to right) Fred J. Moyer, Southern Div. Secretary, Los Angeles *Daily News;* Edw. L. Conley, Northern Div. Secretary; President, Fred Gross, Mechanical Supt., San Francisco *Chronicle;* L. M. Richardson, Southern Div. Vice President, Los Angeles *Herald-Express;* Northwest Div. Vice President, Harry Gale, Portland (Ore.) *Oregonian;* Northern Div. Vice President, Clyde E. Bowen, *Wall Street Journal,* San Francisco.

Business Managers and Superintendents' Clinic

The Business Managers and Mechanical Superintendents' Clinic with Glenn Hutchinson of the Los Angeles *Times*, as chairman, was attended by more than 100. Various topics were discussed. Among the more important were: Newsprint cost, transit damage, weight, elimination of waste; waste paper processing; color printing vs. television; periodic meetings of department heads; production today as compared to the past.

The meeting was addressed by C. M. Reed of the California Ink Co., on color printing; and also by A. Thomas Coogan, California Electrotype and Stereotype Co., of Los Angeles. Mr. Coogan spoke on the quality of stereotype matrices and plates. He predicted the cycle in platemaking technique is getting back to the old "backed mat"—the wet mat and steam tables which is generally believed to be the only way of eliminating shrinkage and getting all there is from cuts and type.

In speaking on production, Harry Eybers, Production Manager of the Salt Lake City (Ut.) *Tribune-Telegram*, said: "I think I can answer for the whole group. You fellows are bashful. You know very well you're not getting more

production, so why hedge it? In tying production with the personnel department, (we just put a man in personnel) we've had a lot of success. Personnel activities include the little things, like John Smith's wife is taken to the hospital. The personnel department sends some flowers. One fellow who said to me, 'I didn't know you fellows knew I was around.' He made it a point to come to my office and tell me he was very grateful for our sending his wife flowers to the hospital and that we realized he was around the place. There are a lot of headaches, but in spite of them all, I think if more of the employers would pay a little attention to their employees all year around instead of just the two weeks they are negotiating a scale, you could get a little more production. Start treating employees as you would like to be treated yourself—as a human being and not a machine.

"I know we're not supposed to bring labor into this discussion, but we are discussing personnel conditions. I think business managers and executives in the newspaper should walk through the plant and get to know the people throughout. Personal executive contact with the workers has a lot to do with it. Start treating men like human beings instead of machines.

Stereotypers' Clinic

According to many, the Stereotypers' clinic, under the chairmanship of Earl Paddock, of the *Racing Form*, Los Angeles, was the best yet held on the Pacific coast. Many topics were thoroughly discussed, a few of which were: Direct pressure, cooling of plates, solid plates, shrinkage, plastic plates and molding blankets.

The clinic went on record as requesting that some means of identification be placed on all mats from jobbers. This would have a tendency to force the jobbers to have more pride in their product and would result in a better grade of mats.

Attendance was about 75.

Photoengravers' Clinic

Roger Hicks, of the *Daily News*, Los Angeles, was the chairman of the Photoengravers clinic. Mr. Hicks did extensive preparation work for this clinic by mail. He sent out a number of personally written letters to prominent engravers in the west asking for suggestions and topics for discussion. The result was a very successful meeting. The main clinic was in session for two hours and the next morning another meeting lasted for three hours.

Attendance was about 50.

Composing Room Clinic

With Chester Rosene, Los Angeles *Daily News*, as chairman, the composing room clinic, with over a hundred present, was a successful session.

The meeting started off by passing a resolution, after much discussion, by insisting that the commercial engravers mark all cuts with the advertiser's name in order that they can easily be identified and placed on the proper ad. Better still that all cuts be sent in with the original copy.

At Pacific Mechanical Conference — Bert Braswell, Machinist, and Cliff Hanlen, Mechanical Supt., Phoenix (Ariz.) *Republic* and *Gazette;* Wally R. Asdell, Sales Representative, Intertype, Los Angeles; George Batty, Machinist, Long Beach (Calif.) *Press-Telegram*.

Another big problem in the west is corrections and alteration of ads after the first corrected proof. The clinic passed a motion: "That we go on record agreeing that we should charge after the first proof for any and all corrections, renovations and alterations of ad copy."

Plastic cuts came in for much discussion with the result that the clinic went on record as "Favoring to continue the use of plastic cuts with the idea that plastic cuts are a step forward and will be a great benefit if the 'bugs' can be worked out." They asked the manufacturers of plastic plates and cuts to cooperate by endeavoring to correct the faults as the composing rooms find them.

A motion was passed: "That the minutes of this meeting pertaining to plastics be submitted directly to each manufacturer of plastic cuts and plates." If these manufacturers will get in touch with the secretary, Fred J. Moyer, care of Daily News, 1257 S. Los Angeles St., Los Angeles, Calif., he will mail a copy of the printed proceeding of the conference.

Many other topics were discussed at length. Among them were the Teletypesetter; molding pressure; mat shrinkage; markup time, and many others.

Pressroom Clinic

About 100 pressmen under the chairmanship of Ray Brown, of the Long Beach (Calif.) *Independent*, held another successful session. Jack Glenn, of the Long Beach (Calif.) *Press-Telegram*, was co-chairman. The meeting was addressed by M. L. Gebhard, Minnesota mining and Mfg. Co., whose subject was, *Is Most Poor First Impression Printing Caused by Offset?* He showed a number of slides to demonstrate the advantages of using glass-beaded drawsheets. His talk was very instructive and well received by all present. Many questions were asked, answered and thoroughly discussed.

Other topics considered were: Impression, blankets, variation in thickness of stereotype plates, temperature of ink' fountains, pre-loaded bearings, rollers, etc.

Composing Room Machinists' Clinic

The machinists, as usual, had a successful clinic, this time with P. B. Menard, of the Hollywood (Calif.) *Citizen-News*, as chairman, Bert Fellows, Director of Printing, California State Polytechnic College, San Luis Obispo, Calif., was co-chairman of the first session. P. H. Sanford, Tucson (Ariz.) *Star-Citizen*, acted as co-chairman of the second session.

E. H. Hostetler, Intertype Corporation, and Jack Huie, Mergenthaler Linotype Co., both gave interesting talks on what is new in their products.

Bert Fellows, Director of Printing of the State Polytechnic College, brought 21 of the students from the printing classes of the college as guests and observers. The boys had a good opportunity to get a first hand impression of what is ahead for them.

Brought up for discussion were: Care of back mold wipers, pot mouthpiece lockup, maintenance schedules, cleaning and care of main cams and several others.

Elrods and Ludlows were discussed at length with Wes Lantis, of the Ludlow Typograph Co., answering a lot of questions. These two machines were analyzed thoroughly and the machinists present received a lot of information and ideas.

The Linotype Parts Co.'s new quadder attachment was discussed thoroughly.

Gadgets were about crowded out because the other discussions lasted too long even after having a second meeting. The two that were mentioned were: An automatic center punch used to open the lower part of the air vents in the mouthpiece. It is fitted with a small curved chisel instead of the center punch. The center punch can be used to close the opening in case it is too large. This gadget was presented by J. J. DeVinney, of the San Diego (Calif.) *Journal*. Another gadget, by V. C. Shidler, Glendale

(Calif.) *News-Press*, was a tool for cutting angle base for angle ads. It is small enough to carry in the apron pocket and weighs 3 oz.

Present at the first meeting were 80 and at the carry-over meeting Sunday Morning 53 attended.

Non-Metropolitan Newspaper Clinic

At the Non-Metropolitan Newspaper clinic problems of all the mechanical departments of the smaller plants were taken up. The chairman for this clinic was unable to attend at the last moment and Marion S. Walker, Ventura (Calif.) *Star-Free Press*, acted as chairman and did a wonderful job without any preparation. There were 80 present.

The Speaker was Hobart B. Hicks, American Type Founders. His subject was *Practicability of Offset for Weekly Newspapers*. There was much discussion and many questions were asked about this printing process, all of which indicated that there was much interest in the talk.

There was a lot of discussion about having inter-plant meetings of the heads of the different departments. Some of these meetings are held each morning for 15 min., to lay out the day's schedule and bring up anything new on the agenda for that day. Others hold weekly or monthly meetings. The consensus was that these meetings are well worth while and did a lot of good.

Other topics discussed were: High cost of production and supplies, engraving problems of the smaller plants and press troubles.

A number of suggestions were made as to ways of improving the clinics for these smaller plants.

Mailers' Clinic

The Mailing Room clinic is finally coming into its own. After repeated efforts on the part of the officers of the conference this year a fairly representative group assembled to discuss problems. The mail rooms are fast being mechanized and the heads of these departments find they have much to discuss.

This year Jacob Baboir, Foreman of the mailing room of the Los Angeles *Daily News*, was chairman. The officers mailed out about 50 letters to circulation managers of the larger newspapers in this district and in return they made it possible for the heads of their mailing rooms to attend the conference. Chas. A. Pirie, of the San Francisco *Chronicle*, is one of the mailers early to recognize the need for meetings of this group. E. S. Egan, of the Portland *Journal*, is another mailer who has always been present up to this year.

The session lasted two and one half hours and the discussions were lengthy and enthusiastic. The topics brought up for discussion included: A comparison of the different tying machines, bundling machines, conveyors, costs, mailing room layouts, stuffing and inserting machines. Plans for future clinics were discussed and many good suggestions were offered.

Closing Session and Business Meeting

A cocktail party was given by the supply firms followed by the conference banquet. Music was furnished for both of these affairs by the supply firms.

The nominating committee's report was adopted which named San Francisco as the next conference city in 1950. Also the new officers elected were as follows: Fred Gross, Mechanical Supt. of the San Francisco *Chronicle*, was named President; L. M. Richardson, Superintendent, Los Angeles *Herald-Express*, Vice President, Southern Div.; Clyde E. Bowen, San Francisco *Wall Street Journal*, Vice President, Northern Div.; Harry Hale, Production Mgr., Portland (Ore.) *Oregonian*, Vice President, Northwest Div.; Fred J. Moyer, Los Angeles *Daily News*, Secretary, Southern Div.; Edw. L. Conley, San Francisco *Chronicle*, Secretary, Northern Div.; Lester Crebassa, Seattle (Wash.) *Times*, Washington Representative.

Iowa Mechanical Conference

THE twenty-second annual meeting of the Iowa Daily Newspaper Mechanical conference was held at Hotel Hanford, Mason City, Ia. on May 14, 15 and 16. There were 200 present, in addition to many representatives of manufacturers and suppliers.

President Kenneth Waughtal of Denver, Colo., but formerly of the Kayenay Engraving Co., Mason City, Ia., presided.

At the opening session, W. Earl Hall, managing editor of the *Globe-Gazette*, addressed the group on *Interesting People —Presidents to Screwballs*, taking in stride a few interruptions planned by convention big-wigs. "The greatest compensation anyone gets in the newspaper business is not the money earned, but the people one meet," said Hall.

1949-1950 Officers, Iowa Newspaper Mechanical Conference — (Seated, left to right): First Vice President, L. T. (Tommy) Caldwell, Cedar Rapids (Ia.) *Gazette;* President, Howard (Red) Lee, Ottumwa (Ia.) *Courier;* Second Vice President, Mike Mills, Clinton (Ia.) *Herald*. (Standing, left to right): Immediate Past President, Ken Waughtal, Boldt Engraving Co., Denver, Colo.; Secretary-Treasurer, Paul F. Kamler, Clinton (Ia.) *Herald*.

Sunday Night Banquet

Featured speaker at a Sunday night banquet attended by 300 in the Wedgewood room was Laurence C. Martin, associate editor of the Denver (Colo.) *Post*. His topic was *A Free Press in a Democracy*.

Martin said it is important that the newspapers exhalt some of the glories of democracy when there are other groups so concerned with it in reverse.

"The danger is an indifference to freedom on the part of the press," he stated. "It's like a muscle which when not used, becomes no good. Our access to men's minds is a great duty and privilege but it must be done with the greatest care, like the harnessing of electricity."

Lee P. Loomis, publisher of the *Globe-Gazette* and president of the Lee group of newspapers, was master of ceremonies. He introduced the guests at the banquet, presided over by President Waughtal.

Composing Room Session

Lee P. Loomis, publisher of the Mason City *Globe-Gazette* pinch-hit for John Huston, publisher of the Ottumwa (Ia.) *Courier*, in talking to the composing room men. He cited the desire of every publisher to get more production at less cost, but pointed out that publishers are on the spot. "Production costs are still raising and income is becoming stationary," Loomis said.

Al Rosene, Mechanical Supt. of the St. Paul (Minn.) *Dispatch*, gave figures supporting Loomis' statement on operating costs and said that many types of plants may call layoffs during slack periods, but a newspaper must be in continuous operation.

"A newspaper is a semi-public utility," Rosene pointed out, "but due to high operating costs the number of competitive news situations is dwindling."

Farther along in his address, Rosene discussed ways and means for efficient operation, particularly with respect to securing group cooperation. He said: "Our organization, representing a number of papers, believes in learning how the other fellow operates. If he is doing a better job, we want to find out how he does it. That same thinking goes into our planning when trying to solve a problem in our composing room; in fact, that same approach is applied in all our mechanical departments.

"When we lay out a room, we scale the equipment to be contained therein. We ask for ideas, we ask for criticism, believing that collective thinking is the better solution to the problem at hand.

"We make the same approach on machine layouts. What molds, what type faces, and the combinations are to be used? Ad figures in side units, receive the same thinking and analysis.

"Just the other day in laying out a mixer machine, our group consisted of key day and night operators, day and night ad foremen, the machinist, our composing room foreman and even our electrician. In such a meeting I act as the chairman and all ideas are thoroughly explored. If we think an idea is wrong, we do not arbitrarily dismiss it without a clear explanation being given as to our reason. If an individual makes a suggestion, he is given an opportunity to explain why he thinks his idea is a sound one."

During the question and answer period, much discussion took place as to the operation of Teletypesetters and their place in today's composing room. a. P. Scott of the Decatur (Ill.) *Herald*, answered several questions as to the setup Jt Decatur. He also explained the use of Teletypesetters in handling classified composition and its use in setting markets and spot news.

Other subjects discussed included advertising headlines, charges for revised ad composition and various composing room problems.

One newspaper representative said all of his paper's advertising copy was typewritten; another returned all copy not legible to the advertising department to be rewritten before it was accepted for a layout.

Press and Stereotype Group

In the stereotype and pressroom section of the conference, several company representatives were heard from.

These included I. Tornberg, Vice President of the Wood Newspaper Machinery Corp., who spoke on *What's New in Stereotype Machinery*, Claude Purkis, Sales Manager of the Imperial Type Metal Co., who spoke on *Type Metal Explained*; M. L. Gebhard, production supervisor of the Minnesota Mining and Mfg. Co., who spoke on *Is Most Poor Impression Printing Due to Offset?*, Victor E. Fishburn, Vice President of the Burgess Cellulose Co., whose subject was *Mat Manufacturing in 1949*, and Dave Baar, representative of the Goss Printing Press Co., who talked on *Printing Press Equipment*.

John Nolen, Sta-Hi representative, was on hand, and answered many questions regarding his company's equipment.

Photoengravers

An interesting talk was given by Robert Patterson, Technical Director of the I.P.E.U. Mr. Patterson gave a cheerful outlook on the future of photoengraving, especially in the four-color newspaper process and magnesium plate field. He also talked about the Fairchild process and he said that it wasn't a laughing matter but engravers did not have too much to worry about the process and that the union could control the machines in case they developed into something practical.

He talked a little on the dry offset process which appears to be a certain element in future newspaper work.

Group discussions were held on the Fairchild process and on newspaper four-color processes.

Supply men gave a practical demonstration of the automatic diaphragm control used in halftone photography.

Linecasting Machinists

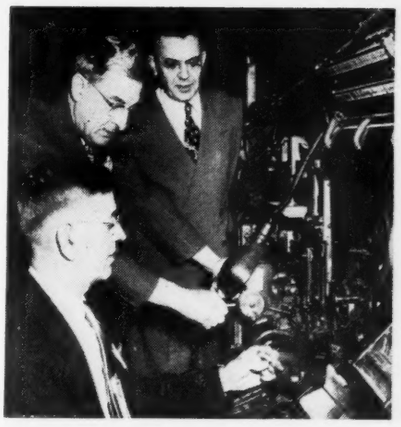
The Linecasting Machinists met at 9:30 Sunday morning May 15, with President Bert DuSold, *Globe-Gazette*, Mason City, Iowa, presiding. There were about 75 in attendance.

The whole meeting was based on questions and answers which had been turned in and these were answered from the platform by Bob Deater, Mergenthaler Linotype Co., Wally Severin, Intertype Corporation, and machinists from the floor.

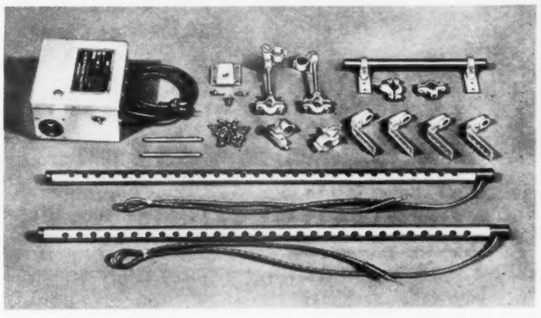
One question, pertaining to a Linotype with quadder regarding vise jaws failing to return properly when using certain sizes of type and only when used in the auxiliary position, was answered by Bob Deater. His advice was first, to check the air chamber on the quadder —see that no fine metal dust has worked itself into the chamber. Second, check the barrell on the left hand lower side of the quadder and see if it has worked loose. He stated that on two different occasions he had found this to be the cure. It, of course was assumed, that the jaws and track were clean. A discussion followed on the proper method of lubrication for the vise jaws in the quadder. Some maintenance men used fine oil; others kerosene, but most preferred to wash the jaws and track scrupulously clean and free from all oil—then to use finely ground dry graphite. Those using this method declared that when this was once done, only a weekly dusting of graphite is necessary.

Wally Severin, in answering a question regarding matrices jumping from the assembler, told of how Intertype by using a high-speed camera had recorded the movement of a matrix from the time it left the magazine, following it all the way to the assembling elevator. By studying this film in slow motion, he said it was amazing the gyrations taken by a matrix in its travels. He went on to advise that the matrix delivery belt be not too loose, that the support under it be kept close to the belt, watch that the belt is not stretched too much; the star wheel be of the correct tension and the assembling elevator matrix retaining pawls be set properly. Correct setting of the chute is also very important he declared, saying further that in most cases one would find this spring to be set too high—it's purpose being to deflect the matrix as it

(*Continued on Page 51*)



1949-1950 Officers, Iowa Line-casting Machinists Assoc.—(Standing, left to right): President, M. F. Dingman, Cedar Rapids (Ia.) *Gazette;* Vice President, T. C. Keene, Waterloo (Ia.) *Courier;* and Secretary-Treasurer, Leo Rosenberger, Clinton (Ia.) *Herald*.



Static Eliminator — Chapman Electric Neutralizer Co. has announced a low-voltage static eliminator for installation on small and medium size letterpress and offset presses where space liminations make it impractical to install high-voltage equipment. Shown in a transformer and parts suited for installation on Harris offset presses. ***Printing Equipment Engineer*** will furnish information.

EQUIPMENT & SUPPLIES

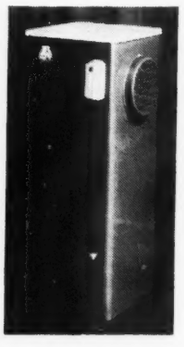
Correction

Gremlins are present in editorial offices as well as printing plants. They got in their dirty work in the June issue of *Printing Equipment Engineer*. In making up that issue the cuts of the Color Harmony Manual announced by the Color Standard Dept. of Container Corp. of America and International Printing Ink's Color Guide for Boxboard, which appeared on pages 73 and 75 respectively, were transposed. *Printing Equipment Engineer* regrets this error and at present, is staging an all-out gremlin campaign.

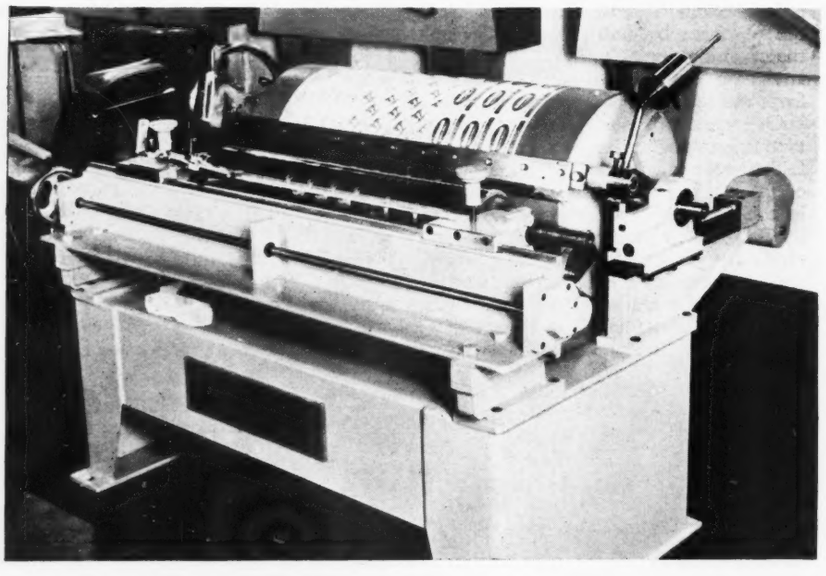
Press Improvement Reported by EBCo.

ENCOURAGED by acceptance of its 22 in. by 34 in. offset printing press, the Electric Boat Co. reports the building of a pilot model of a larger size press at its plant in Groton, Conn. The company also reports it has other sizes and multi-color presses on the drawing boards or in the planning stage.

More than 50 individual improvements have been made, states the EBCo., since the initial postwar design press was inaugurated in 1947. Among the improvements reported in the 1949 model are the following: (1) More positive roller settings by improvements to ink and water units. (2) Graduated scales on the feeder with corresponding scales on the side guide bar. (3) Simplified pull type side guide. (4) Hand grips at each side of the inker unit. (5) A hand rest on the cylinder guard at the delivery end of the machine. (6) Two safety features added to main control push button panel: the *stop* button enlarged and raised beyond the *start*, *jog* and *feed* buttons to make it easier to press in an emergency; the *start* button covered by a hinged guard so it cannot be pressed accidentally. (7) Simplified, more positive feeder clutch. (8) Readily accessible pile height adjustment screw on the feeder. (9) Feed or transfer cylinder cast in one piece. (10) Simplified trip mechanism. (11) Bearer guards slotted for removal when cleaning bearers. (12) Improved V belt drive sheaves for removal and replacement of belts.



Dehumidifier — **Niagara Industrial Corp. has announced the Sahara Dehumidifier, an apparatus for combatting moisture problems in industry. Enclosed in a two-tone mahogany cabinet, 15¾ in. by 15¾ in. by 41½ in. high, it may be plugged in any electric outlet for operation. Equipped with a hopper filled with calcium chloride crystals, the Sahara draws in the air by means of a motor directly connected to an axial flow fan, extracts the moisture and drains it off into a 2½ gal. galvanized container. Additional information may be obtained by writing *Printing Equipment Engineer*.**



Rotogravure Cylinder Proof Press — Pictured is the ATF-Klingrose rotogravure cylinder proof press for pulling pre-production proofs of engraved cylinders. Sponsor states that this machine enables corrections to be made on the plate without mounting cylinders on major production equipment. It is claimed by the manufacturer that this is the first such press to be made commercially available to the trade. Further details may be obtained through *Printing Equipment Engineer*.

Full-Page Stereo Page Shaver

DESIGNED for the production requirements of the larger weekly and smaller daily newspaper plant is the Hammond Full-Page Stereotype Page Shaver announced recently by Hammond Machinery Builders, Inc. Features of the machine are the ball bearing table and tungsten carbide tipped knife blade. Power requirement is 1½ h.p. motor.

Hammond Machinery Builders announce Full-Page Shaver for large weekly and small daily newspapers.

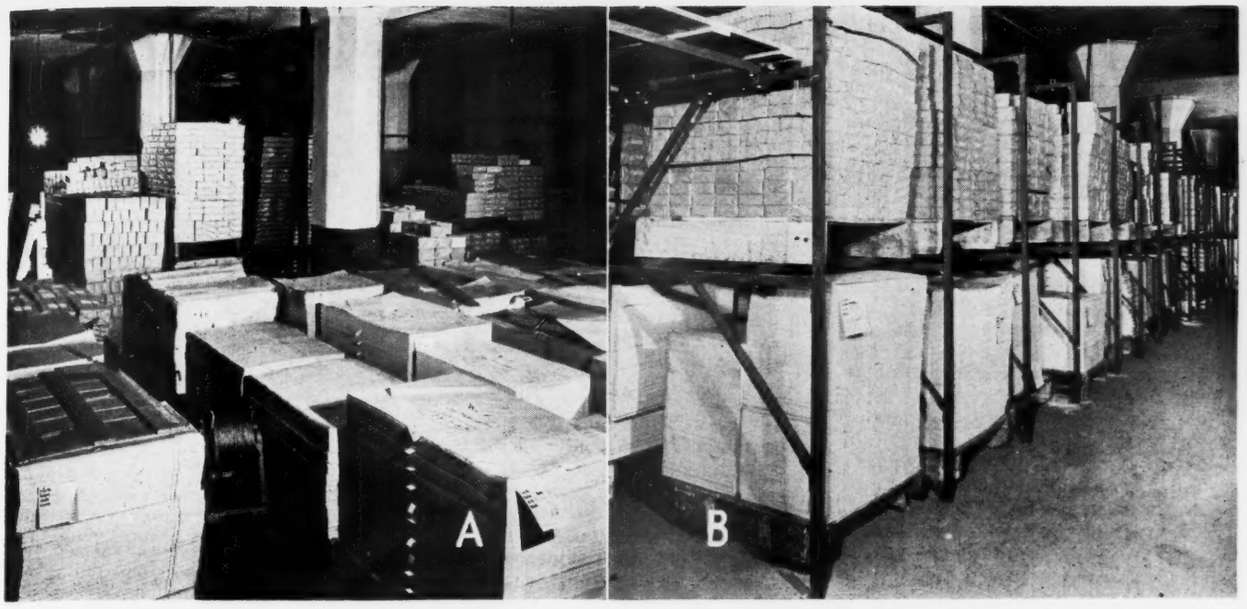
A handwheel sets the head and blade to any position from ⅛ in. to 1 in. above the table. The position of the blade to the table is shown on a scale calibrated to 0.100 in. and on a micrometer dial calibrated to 0.001 in. Also indicated on both scale and dial are type high (0.918 in.), base high (0.766 in.), and 11 pt. shell (0.152 in.).

Chip chute and buggy are provided for shavings. Plate hold-down rollers are located in front and back of the carbide blade. Automatic clutch disengages when shaver is overloaded. It engages again when the motor is stopped and started. Specifications: max. plate size, 19 in. by 26 in.; time for full shave, 12 sec.; table height, 36 in.; floor space, 34 in. by 65 in., and net weight, 1460 lbs.

Additional information may be obtained by addressing your request to *Printing Equipment Engineer*.

Dow Latex Booklet

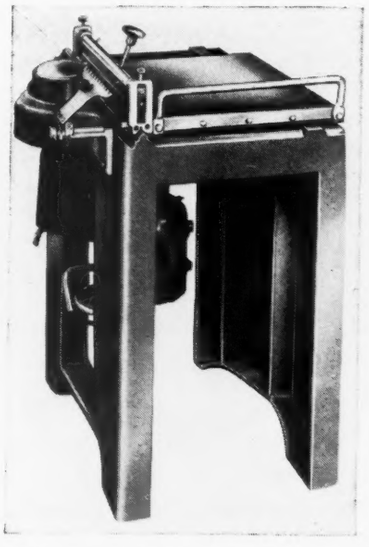
INFORMATION concerning Dow Latex 512K, a coating material for improving clay coated papers, has been made available in the form of a 16-page booklet issued by The Dow Chemical Co. The booklet deals with the use of 512K as a pigment binder, in blends with other adhesives and its use in coating colors. In connection with printing on coated stocks, it states, 512K is a determining factor in folding, finish and handling on presses. Sponsor claims that Dow Latex 512K helps combat picking and spottiness in paper. The properties and a table of the physical constants of the material are also included. Attractively layed out and printed in two colors, the booklet measures 8½ in. by 11 in.



Solve Congestion Problem — These two photographs illustrate how A. R. Barnes & Co., Chicago printers, eliminated storage problems. The problems were the storing of miscellaneous sizes and kinds of paper, customers' printed forms, and conserving limited space for traffic and other purposes. Fig. A shows the condition of the paper storage facilities in the Barnes plant before J. Anderskow, General Supt., installed Unistrut double layer pallet racks, pictured in Fig. B. The paper for the presses is now kept on skids on the floor while the printed forms are stored on the second level of the racks. Valuable floor space this paper once occupied is used for traffic and other operations. For information concerning the storage racks address your request to Unistrut Products Co., in care of *Printing Equipment Engineer*.

Morrison Plate Beveler

DESIGNED for cutting metal from the edges of printing plates the Morrison Plate Beveler was recently announced by The Morrison Co. Sponsor claims each mounting shoulder or bevel cut into the plate is free of burrs.



A Plate Beveler claimed to produce burr-free mounting shoulders or bevels has been announced by The Morrison Co., with the cutter head mounted on a vertical, belt-driven shaft.

Cutter head is mounted on a vertical, belt-driven shaft and steel feed bed is mounted on roller bearings. Accommodates square finished engravings ranging in size from ¾ in. by 1 in. to 20 in. by 20 in. Other features include a line-up gauge, tightener, and adjustable clamp with a leather contact pad to protect plate faces against scratches and mashing.

In operation, the plate finisher lays the plate under the clamp, positions it with the line-up gauge, swings the clamp tightener and pushes the feed bed forward. Three key-locked, tool-steel cutters regulate shoulder width, and a hand wheel controls the operating height of the 4 in. cutter head. Hand wheel is locked into position by two hand screws.

Dimensions are, 35 in. wide, 30 in. deep and 36 in. high. Shipping weight is 930 lbs. Motor: ½ h.p., 110 v. or 220 v., a.c. or d.c. Additional information may be secured by writing *Printing Equipment Engineer*.

Portable Plastic Binder

DESIGNED for binding booklets, reports, photographs, technical data, documents and similar material, is table model punch and binder announced recently by General Binding Corp. The binding is fabricated from Vinylite sheets in various colors, and is available in 22 in. lengths and in eight internal diameters ranging from 3/16 in. through 5/8 in. Desired lengths can be cut from the 22 in. lengths with ordinary scissors.

In operation, the sheets and covers to be bound are punched on a table model hand punching machine, which makes rectangular holes. A Vinylite plastic comb is next placed on the table model binding (comb spreader) machine. The rings of the binding are opened simultaneously by a lever. The punched book and covers are slipped over the rings of the plastic binding strip. The handle is released, the comb rings close automatically and the finished plastic-bound book is lifted from the machine.

Additional information may be obtained by addressing your request to *Printing Equipment Engineer*.

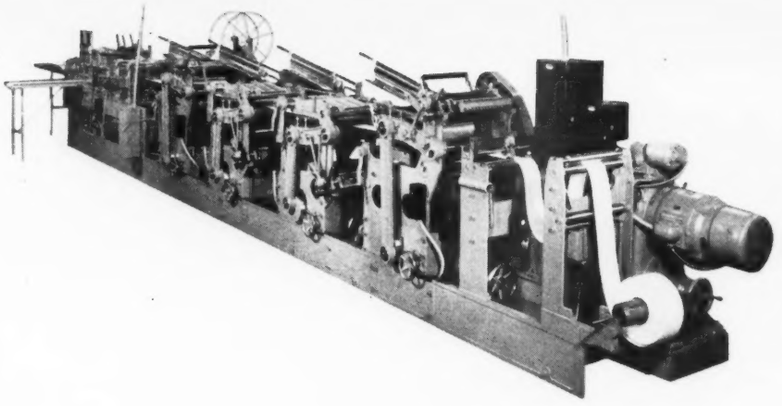
Top photo shows sheets and covers to be bound being punched on table model punching machine developed by General Binding Corp. The plastic comb on the binding machine in lower photo is being spread open ready to receive punched sheets for binding.

Pearce Automatic Press

THE Pearce Development Company's Automatic Press will print and fabricate tags, tickets and labels. The recommended maximum machine speed is 6500 per hour; depending on the size, from one to eight tags can be printed at each stroke, producing from 6500 to 52,000 forms per hour.

The Pearce Machine can be made with any number of printing units, for one or two side printing; the illustration shows a 4 press machine for 2 colors on each side. In addition to printing, the machine handles all of the usual tag and label features, such as punching, numbering, corner cutting, applying tag patch, eyeletting and perforating. Standard cutting is in single units or in gangs of any number; die cutting (shown in illustration) or rewind equipment is furnished to order.

Printing and fabricating are done from roll stock. As will be seen in the illustration, the stock roll is mounted on an idle spindle at the right end of the press. Feed



View of Pearce Development Co.'s Automatic Press which will print and fabricate tags, tickets and labels. From one to eight tags can be printed at each stroke, producing from 6500 to 52,000 forms per hour. Printing is done flatbed from metal or rubber. The new die unit (conveyor of which is visible at upper left) is designed for cutting completed labels of most any size and shape from the web.

In this illustration is shown a pair of Doyle Infrared Drying Units. These units are representative of eight 16 in. units mounted in pairs following each of the four printing units of the Pearce Automatic Press shown in the other illustration. One unit is mounted above and the other immediately below the web. May be adjusted for proximity in relation to the web. Driers go into action automatically when press controls are moved to press running position.

of the stock through the press is intermittent—that is, there is an interval in the forward motion of the web to permit the various printing and fabricating operations. The feed of the web is governed by the first two rollers visible in the picture at the right-hand side. The rollers revolve at command of the driving unit and the amount of feed is governed by an electric eye device.

Printing is done flat-bed, from metal or rubber, each press carrying 3 form rollers. The type form for printing the top side of the web is mounted in inverted position on the underside of the platen of the press unit. Units are of clam-shell type and are crank-driven. The type form for printing the underside of the web is mounted right side up, of course, on the platen of that press unit. Chases are 12 in. by 14 in. size.

Following the printing operations, the fabricating operations take place. There are stations for slitting, scoring, punching, reinforcement of holes, perforating, eyeletting, corner cutting, etc. Final operation at the end of the press is the cutting apart of the individual tags which fall upon a moving tape delivery ready for packing. Delivery in gangs or rolls can also be cared for.

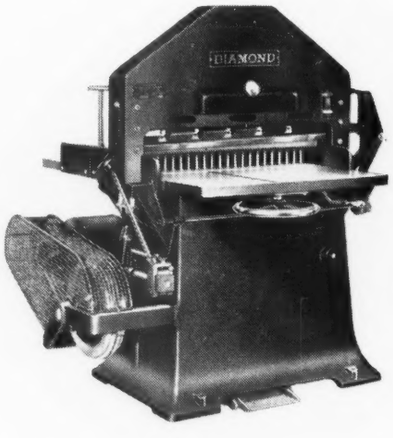
One of the recent improvements in this press is a device which separates cut tags or labels in groups of 50 so the packer does not have to watch the press counter.

Another improvement is a die unit with side delivery (delivery visible in illustration at upper left). This die unit is designed for cutting completed labels (of most any size and shape) from the web. After each label is cut, it falls upon a tape delivery the travel of which is at one side of the press.

On the press shown in the illustration are mounted eight 16 in. Doyle Infrared Drying Units. They are mounted in pairs following each of the four printing units, one unit mounted above the web, the other below the web. Each pair is mounted on hinged arms so as to counterbalance each other. The distance they operate from the web can be controlled by an adjustment from any position on the operating side of the press. The temperature best suited to any particular job can be selected readily. Current for operating the Doyle Driers is controlled automatically through relays wired into the running press controls. Thus the press can be inched or jogged without turning on the Driers. Driers go into action automatically when press controls are moved to running position. The Driers may be turned on independently of press controls when desired.

Numbering Machines

WETTER Numbering Machine Co. offers a folder in which is described and illustrated the company's line of machines for automatic numbering in conjunction with printing. Printed in two colors, the folder covers machines designed for a wide range of applications, from the all-around type-high machine for general use on large diameter presses to the specialized types such as those for numbering cash sales slips, parking tags, tickets, etc. Copies may be obtained by writing *Printing Equipment Engineer*.



Challenge Paper Cutter — Challenge Machinery Co. has announced a 36½ in. hydraulic clamp power paper cutter. Clamp is controlled by foot pedal, and is equipped with a Vickers hydraulic unit and a 1 h.p. motor. This mechanism makes it possible to stop the clamp at any point in its downward travel. Other features include double motion starting lever, double equalizing brake, duplex steel measuring tape, safety paper guard, and back-guage lock. Standard equipment includes Challenge fluorescent table light, tape magnifier, and two knives with steel knife guards. Additional information may be obtained by writing *Printing Equipment Engineer.*

Linotype Electra Bold

ELECTRA Bold with italic and small caps, and also Electra Bold with Cursive and small caps have been cut by the Mergenthaler Linotype Co. The combinations are now available in sizes 8, 9, 10, 11 and 12 point. Examples of both combinations are shown below:

8 Point Electra Bold with Italic and Small Caps

LINOTYPE abcdefghijklmnopqrstuv 123
***LINOTYPE abcdefghijklmnopqrstuv* VBC**

12 Point Electra Bold with Cursive and Small Caps

LINOTYPE abcdefghijklm 123
***LINOTYPE abcdefghijklm* VBC**

Rotograf Presses

WESTERN Gear Works has announced the development for the rotogravure industry of the Rotograf, a web press utilizing a thin metal wrap-around plate that is drawn around the plate cylinder, similar to methods in use on web offset presses. Provision is made to close the gap where the plate is supplied to the cylinder, in order that the plate may be inked and printed in the same manner as a standard rotogravure cylinder.

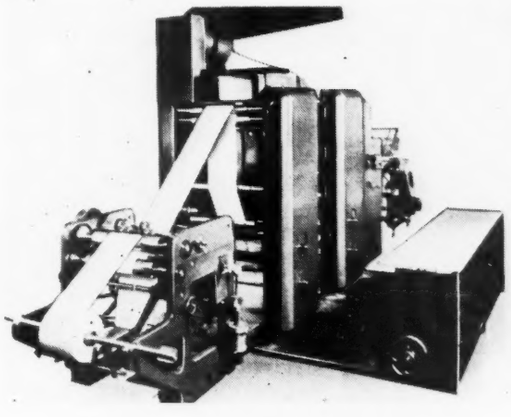
Each unit of the Rotograf press has one color cylinder, and construction is designed so as many units as desired may be coupled together. Each unit also contains a turn-over bar and drying oven. Roll stand, cut-off units, pile delivery, and rewinders are all built to a standard line shaft.

Because work coming from the press is dry, states the sponsor, it can be fed directly into a folder, pile delivery, or rewinder without smudging or offset. A common duct exhausts hot air from the drying chambers on all units.

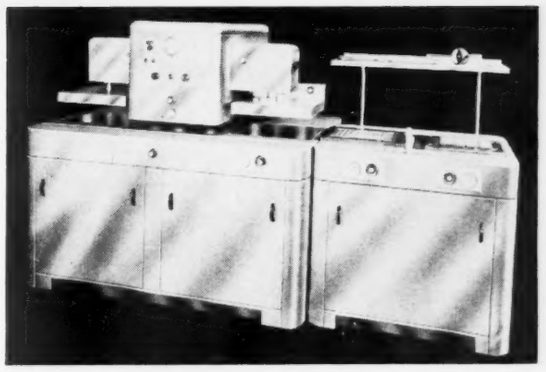
Printing impression is accomplished by hydraulic mechanism and is controlled simultaneously on all units by a valve mechanism.

Ink and solvent are contained in a cabinet with work-table top at the side of the press. Containers for the various colors are stored opposite their respective units. Turning of a valve allows the ink to be pumped out of the lines and solvent pumped in for washing the press.

Additional information may be secured by addressing your request to *Printing Equipment Engineer.*



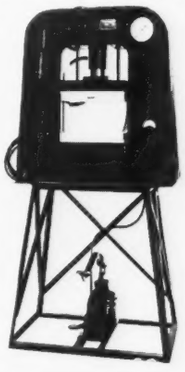
Two-color Rotograf Press manufactured by Western Gear Works. View is from roll stand end, showing the paper guide, automatic tension and doctor blade assembly.



Thermoplastic Molding Press announced by Monomelt Co., Inc., shown with tempering table (right) installed as part of unit.

Plasticote Press

ANNOUNCEMENT has been made by Studebaker Machine Co. of a hydraulic molding press equipped with electrically heated platens with which a printer can make plastic molds from foundry type, linotype slugs or



Plasticote Press announced by Studebaker Machine Co. for making plastic molds for rubber plates.

electrotypes. From the molds, duplicate rubber plates can be made for printing.

The press has 12 in. by 12 in. platens which are electrically heated on 220 v., 22 amp. circuit. Platen temperature is thermostatically controlled. Machine is equipped with a pyrometer temperature recorder. Pressure is obtained by foot-operated hydraulic pump which produces pressures which are recorded on a 40 T. pressure gauge.

Specifications for the Model 140 press are: Base, 22 in. by 30 in.; floor to surface of lower platen, 39 in.; over-all height, 62 in., and, shipping weight, 675 lbs. Further details may be obtained by addressing your request to *Printing Equipment Engineer.*

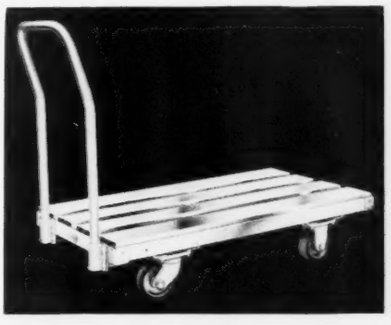
Thermoplastic Molding Press

MONOMELT Co., Inc., has announced a thermoplastic press for the production of plastic molds for electrotyping. Feature of the press, claims the sponsor, is the rapid-action ram, which closes in a few seconds to eliminate the possibility of unsatisfactory molds resulting from escape of heat from form and molding material.

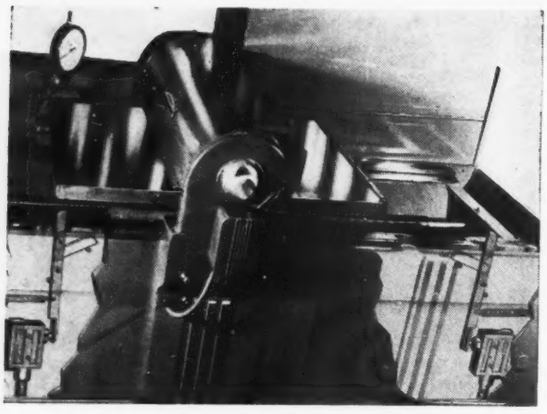
Throughout operation of the press, pressure, temperature and timing are controlled automatically by pre-settings. Movable and stationary platens, both hot and cold, are 16 in. by 20 in., and the effective molding area of the press is 16 in. by 21 in. Movable platens are operated by plunger-type, four-way air valves with individual flow controls on each line. All hot platens have individual thermostats and thermometers.

Hydraulic ram is 14½ in. in diam., and delivers pressure up to 1500 lbs. per sq. in. Pressure and molding depth are controlled by a motor-driven pressure-depth selector which is set by push buttons. Daylight opening of the ram is 2 in. The two-stage hydraulic pump is powered by a 3 h.p., 220 v., 60 cy. motor. Push buttons control the motor.

Additional information may be secured by writing *Printing Equipment Engineer.*



Light Weight Truck — A hand truck constructed of heat treated aluminum alloy angles and Hat sections called the Tobey Junior has been announced by Tobey Mfg. Corp. Available in two standard bed sizes, 24 in. by 48 in. weighing 50 lbs., and 30 in. by 60 in. weighing 60 lbs. Equipped with 5 in. dia. aluminum wheels and casters. ***Printing Equipment Engineer*** will gladly furnish further information.



On Monomelt's Plane-O-Plate plate shaver, safety levers and micro switches insure positive stopping of bed stroke. Machine frame broken away in this view to show mechanism. In emergency, thread relief on lead screws (visible in this picture) prevent table jamming if switches should fail.

Improved Plate Shaver

AN improved model of the Plane-O-Plate plate shaver for shaving mounted or unmounted cuts, electrotypes and stereotypes has been announced by Monomelt Co., Inc. Manufacturer announces the table will stop by a new and positive means when it has reached the limit of its forward or reverse movement. This safety feature is made possible by the installation of safety levers and micro switches to shut off the current at the end of each stroke. Sponsor states that thread reliefs on each end of the lead screw provide safety zones to prevent jamming the table or damaging gears if either the levers or switches should fail. Further information may be obtained through *Printing Equipment Engineer*.

ATF-Macbeth pH Meter

AMERICAN Type Founders has announced the development, in collaboration with Macbeth Corp., of a meter for the measurement of the pH (degree of acidity or alkalinity) of

ATF-Macbeth pH Meter, a portable, line operated unit, weighing 15 lbs. Part of hinged cover is cut away.

offset press water fountain solutions as well as solutions used for plate coating or etching.

Designed to measure the pH value from 0 to 14, the meter is portable, weighing 15 lbs. Line operated, the instrument contains a voltage regulator to compensate for wide fluctuations in the power supply.

Further information may be obtained by addressing your request to *Printing Equipment Engineer*.

Riehlock Newspaper Unit

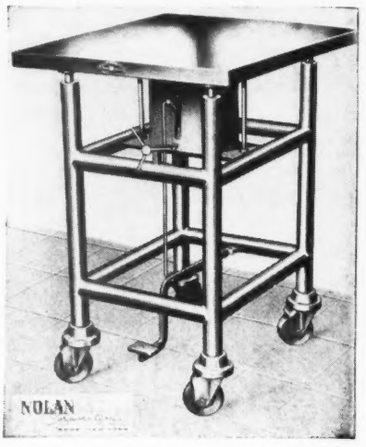
A NEW Riehlock Newspaper Unit for tying various sizes of advertisement composition up to and including a full 8 col. page has been announced by the Riehl Galley Lock Co. Capacities of the Tie-ups range from 1 col. up to 23 in. depth. The unit assortment consists of 184 Tie-ups and 200 Galley End Locks. The Riehlock Tie-up consists of thin tempered steel bands (below type-high) formed in right-angle sections. The sections which form each Tie-up are held together by thin steel bales which permit adjusting each Tie-up to type composition within reasonable expansible range of the designated size. The Tie-ups are used in place of string for handling and storing many sizes of advertising composition.

The Galley Locks accompanying each set of Tie-ups are spring tempered steel and are placed at the lower end of the galley to hold the type or slugs securely in the galley.

Further information may be obtained by addressing your request to *Printing Equipment Engineer*.

Hydraulic Page Truck

A HYDRAULIC elevating newspaper page make-up truck has been announced by Nolan Corporation. The hydraulic mechanism for raising and lowering the table top is con-



Newspaper page makeup truck by Nolan Corporation, with hydraulic mechanism for raising and lowering top.

trolled by a foot pedal. Maximum vertical travel is 5 in. Positive limit stops are used for lining up the table's top with the working surface. Sponsor claims, this automatically provides a ¼ in. differential for transferring forms.

Surface of the truck's table measures 24½ in. by 28½ in. and is precision straight-line ground. Truck's top is extra thick and heavily ribbed. Frame is constructed of 2 in. diam. seamless steel tubing with double braces. Heavy duty 4 in. by 1½ in. tread casters are of the double ball bearing swivel type with Vulc-on composition tires.

Printing Equipment Engineer will gladly furnish additional information upon request.

Graphic Scales Set — Shown above is O. M. Forkert, originator of a visual plastic production set for use by publishers and printers in figuring photo and art reduction, copy-fitting, and determining the number of type lines for any given space. Each set contains a proportion scale, type line meter, and typemeter. The typemeter is used to determine how much space is needed in converting a given amount of typewriter copy into a given style and size of type. Also the same instrument is used to figure how much copy is needed to fill a given amount of blank space with a given style and size of type, and how much type matter is needed to fill a given amount of blank space with a given quantity of copy. Instruments are made of calculator board and non-inflammable plastic. Additional information may be obtained by writing *Printing Equipment Engineer*.

H-S Housewarming

More than a thousand representatives of the Graphic Arts industry were reported to have been in attendance at a housewarming party at the recently completed Eastern District headquarters of Harris-Seybold Co. in New York, on June 1, 2 and 3. Hosts were J. C. Dabney, Eastern District Manager, and his entire staff from New York, Boston and Philadelphia. Company officials journeying to New York for the occasion included: H. A. Porter, Vice President in Charge of Sales; R. R. Perry, General Sales Manager; R. P. Tyler, Manager of Installation and Service; J. A. Swaney, Credit Manager; and R. J. Niederhauser, Sales Promotion Manager. The company's New York offices and display rooms now contain more than 20,000 sq. ft. of floor space at 380 Second Ave. at East 22nd St.

Golden Anniversary

This year marks the fiftieth anniversary of a venture into private enterprise dedicated to the elimination of friction wherever wheels and shafts turn. The Timken Roller Bearing Co. was formed in 1899 and has progressed through a half century of continued expansion, research and development. During these years, some 5 billion bearings, ranging in weight from 2 oz. to 9068 lbs., have been made for use in automobiles, railway locomotives, steel mills, airplanes, ships, and all types of industrial machinery.

The company has expanded to include plants in Canton, Columbus, Zanesville, Mount Vernon, Wooster, Zoarville, and Bucyrus, O.; Colorado Springs, Colo., and St. Thomas, Ontario, Can.

In two world wars Timken placed all of its facilities behind the industrial effort to help win the victories. The founders, Henry Timken and his two sons William R. and Henry H., Sr., fathered a policy of continual research and development in the uses and availability of roller bearings. This policy is still pursued today by Timken officials. It is evidenced by the company's belief that the history of competitive enterprise in this country shows that once a company is satisfied with its position and refuses to advance, failure inevitably follows.

Rubber Plates Bulletin

THE advantages to paper converters and package printers of handling pre-printing production jobs as a single operation are described in a 4-page bulletin issued by Mosstype Corporation entitled *Co-ordinated Art-to-Rubber Plate Production*, it discusses the factors involved in preparation of artwork, pattern engravings and rubber printing plates, and shows how they contribute to the quality of the final printing result. Also included is a directory of rubber plates for different printing requirements. Copies may be obtained by writing *Printing Equipment Engineer*.

Southern Typesetters

An organization of commercial typesetting plants doing business in the Southern and the Southeastern states was formally launched recently in Birmingham, Ala. Officers elected to serve were: President, Frank H. Streifert, Miami (Fla.) Typesetting Co.; Vice President, Gus Russell, Atlanta, Ga., and Secretary-Treasurer, C. R. Tate, Linotype Composition, Jackson, Miss.

The committee appointed to draw up the constitution for the new organization is composed of John M. Bowen, Chairman, Superior Typesetting, Atlanta, Ga.; Earl Fleming, Birmingham (Ala.) Printing Co., and E. N. Earls, Printers Service Co., Nashville, Tenn. All composition plants doing business in the southern and southeastern states are eligible for membership, and are requested to send representatives to the next meeting to be held in Atlanta, Ga., date to be announced later.

Patent Position Stated

In paid space and in letters to trade associations, International Printing Ink has recently stated its patent position regarding the IPI Tri-Metal Plate. IPI informed the trade that the Tri-Metal Plate is an exclusive, patented development of IPI's 10 year research program on the offset-lithographic process. The plate is covered by U. S. Patent No. 2,291,854 (issued August 4, 1942) which covers processing and use.

Announcement of the plate was made in the press and trade paper advertising in July, 1947. It is stated that IPI practically donated the plate to the trade under a liberal low-cost licensing policy available to all. The company points out that offset-lithographers who buy other such plates are no doubt unaware that they require a license to process and use the type of plate covered by IPI's patent.

50th Anniversary

The Columbus (O.) *Citizen* is 50 years of age. On Wednesday, May 25, a special anniversary edition was published to celebrate its 50th birthday. The paper was founded in March 1899. A feature of the anniversary edition consisted of a photoengraved reproduction of the first 8-page issue. Another section consisting of 12 pages contained illustrated historical text devoted to equipment used in producing newspapers 50 years ago as contrasted with present-day equipment. One extremely interesting and well done article is descriptive of the invention and development of composing machines. The mechanical staff of the *Citizen* includes Don Burgoon, Composing Room Supt.; Gilbert Belt, Machinist; Edward Gaus, Pressroom Supt.; Jos. R. Jones, Stereotype Supt., and Jay Kievit, Photoengraving Foreman.

Virkotype Corp. Expands

Manufacturing facilities and executive offices of the Virkotype Corporation has been transferred to a new plant located at 111 Rock Ave., Plainfield, N. J. according to a recent announcement by Kenneth Gebbie, President. The new

Kenneth Gebbie, President, Virkotype Corp. announces new location for manufacturing activities.

building has 14 thousand sq. ft. of manufacturing space. Gebbie stated that service and sales offices will continue at currently established location—1637 Goold St., Racine, Wis., and 601 W. 50th St., New York, N. Y.

Iowa Conference

(Continued from Page 45)

enters the assembling elevator and it couldn't do this if set too high.

Another question pertaining to font distinguishers was given a good going over. It was decided the best way was to take them off the machines—but only if one could get the operator to co-operate in keeping the matrices in the magazine, and not lying on the keyboard.

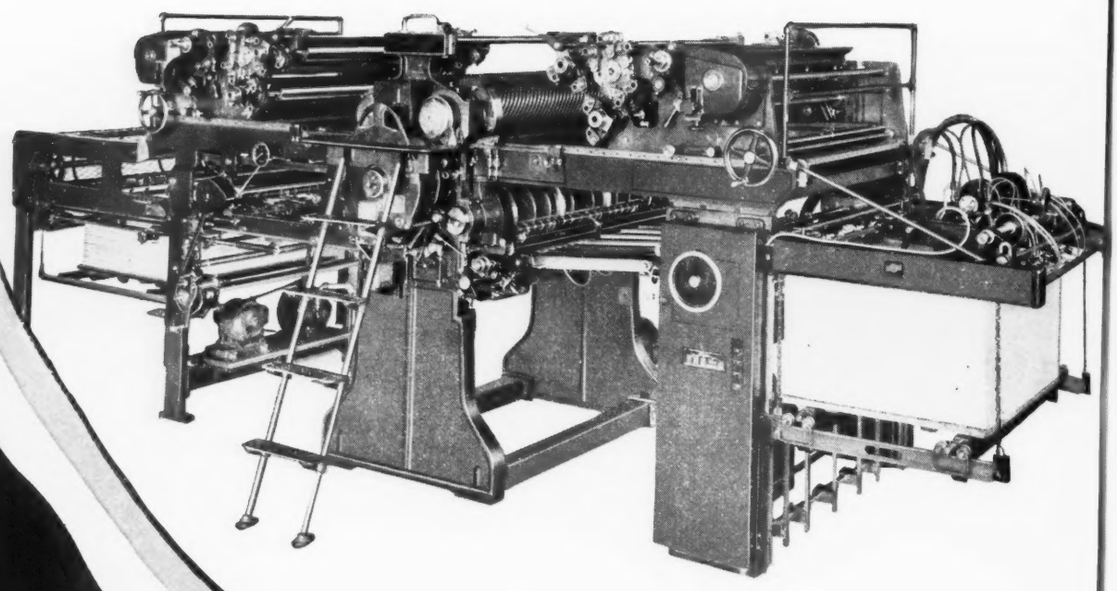
Following the question period election of officers took place with M. F. Dingman, Cedar Rapids *Gazette*, named president; T. C. (Doc) Keene, Waterloo *Courier*, vice president and Leo Rosenberger re-elected secretary-treasurer.

Monday's Closing Session

Howard (Red) Lee, Composing Room Superintendent of the Ottumwa (Ia.) *Courier*, was elected president of the conference at the final session Monday and Ottumwa was chosen as the 1950 convention city.

Other officers elected were: L. T. (Tommy) Caldwell of the Cedar Rapids (Ia.) *Gazette*, first vice president; Ross Devine, Davenport (Ia.) *Times*, second vice president; and Paul Kamler, Clinton (Ia.) *Herald*, re-elected secretary-treasurer.

New division heads elected were M. F. Dingman, Cedar Rapids *Gazette*, Linecasting Machinists; Jerry Lee, Ottumwa, Photoengravers; Mike Mills, Clinton, Pressroom, and Harry Wise, Composing Room.



QUALITY PRODUCTION AT HIGH SPEEDS

Cottrell

C. B. COTTRELL & SONS CO.
Westerly, R. I.
New York: 25 E. 26th St. • Claybourn Division: 3713 N. Humboldt Ave., Milwaukee, Wis.
Chicago: Daily News Bldg., 400 W. Madison St.
Smyth-Horne, Ltd., 13 Bedford Row, London W.C. 1, Eng.

Conference Dates *(with organization names and principal officers)*

American Photoengravers Association — 1949 Convention and Exhibition, Fairmont Hotel, Nob Hill, San Francisco, September 12, 13, 14. Frank J. Schreiber, Commissioner, 166 W. Van Buren St., Chicago 4, Ill.

ANPA Mechanical Conference—1950 Conference to be held at Hotel Statler, Buffalo, N. Y., June 5, 6 and 7. Chairman of the Committee, Edwin H. Evers, Production Manager, St. Louis *Globe-Democrat*. Acting Manager ANPA Mechanical Dept., Vernon R. Spitaleri, 370 Lexington Ave., New York 17, N. Y.

Fifth District Craftsmen's Conference—1950 Conference to be held in Toledo, Ohio. Place and dates to be announced later. Ollie G. Fricke, Fifth District Representative, 43 West Apple St., Dayton, O.; Secretary-Treasurer, John Fisher, Superintendent, Reardon-Parshall Co., 466 Larned St., N. W., Detroit, Mich.

Great Lakes Newspaper Mechanical Conference—Hotel Schroeder, Milwaukee, January 15, 16, 17, 1950. President W. R. Coddington, Composing Room Supt., Youngstown (O.) *Vindicator;* Secretary Al. P. Oberg, Flint (Mich.) *Journal;* Arrangement Chairman J. E. McMullen, Pressroom Supt., Milwaukee *Journal;* Chairman Mfrs. and Suppliers Committee, George Morrison, Morrison Co., 125 W. Melvina St., Milwaukee 12, Wis.

Illinois Newspaper Mechanical Conference—1949 Conference to be held at Orlando Hotel, Decatur, Ill., October 8 and 9. President, Sid Scott, Decatur (Ill.) *Herald-Review;* Secretary-Treasurer, Wilbur L. Augspurger, Peoria (Ill.) Newspapers, Inc.

Intl. Assoc. Electrotypers & Stereotypers — 1949 convention to be held at Mount Royal Hotel, Montreal, Quebec, Canada, September 19, 20 and 21. A. P. Schloegel, Executive Secretary, 701 Leader Bldg., Cleveland 14, Ohio.

International Association of Printing House Craftsmen—1949 Convention to be held in San Francisco, Palace Hotel, September 4, 5, 6, 7, 1949. President, Gradie Oakes, Process Color Plate Co., 522 So. Clinton St., Chicago 7. Executive Secretary, Pearl E. Oldt, 18 E. Fourth St., Cincinnati 2, Ohio.

International Typographic Composition Association—1949 Convention to be held at Hotel Statler, Boston, Mass., September 22, 23 and 24. Frederick H. Lutz, President, Brockton, Mass.; Frank M. Sherman, Executive Secretary, 1015 Chestnut St., Philadelphia 7, Pa.

Iowa Daily Newspaper Mechanical Conference — 1950 meeting in Ottumwa, Ia. President, Howard (Red) Lee, Composing Room Supt., Ottumwa (Ia.) *Courier;* Secretary-Treasurer, Paul F. Kamler, Mechanical Supt., Clinton, (Ia.) *Herald.*

Kansas Newspaper Mechanical Conference — 1949 meeting to be held at Hotel Kansan, Topeka, Kan., October 1 and 2. President Vern Williams, Mechanical Supt., Topeka Newspaper Printing Co., Topeka, Kan.

Lithographers National Association — President, Randolph T. Ode, President, The Providence Lithograph Co., Providence, R. I.; Executive Director, W. Floyd Maxwell, 420 Lexington Ave., New York 17, N. Y.

Missouri Newspaper Mechanical Conference — 1949 Conference, Hotel Conner, Joplin, Mo., September 10 and 11. President, Paul S. Ginn, Press Foreman, Sedalia (Mo.) *Democrat-Capital;* Secretary-Treasurer, O. K. Hammitt, Mechanical Supt., Moberly (Mo.) *Monitor-Index;* Chairman of Supply Men's Committee, Robert Robinson, Representative, Certified Dry Mat Corp., 9 Rockefeller Plaza, New York 20, N. Y.

National Association of Litho Clubs — Secretary, William J. Stevens, 317 West 45th St., New York 19, N. Y.

National Association of Photo Lithographers — 1949 convention will be held at Hotel Statler, New York, N. Y., October 19, 20, 21 and 22. Executive Vice President, Walter E. Soderstrom. 317 West 45th St., New York 19, N. Y.; Executive Secretary, William J. Stevens, 317 West 45th St., New York 19, N. Y.

National Graphic Arts Education Association — John G. Henderson, President; Fred J. Hartman, Educational Director, 719 Fifteenth St., N. W., Washington 5, D. C.

National Graphic Arts Exposition—International Amphitheatre, Chicago, September 11 to September 23, 1950. Headquarters for National Graphic Arts Exposition, Inc., at Room 802, 105 W. Monroe St., Chicago. President, A. E. Giegengack; Secretary, S. Frank Beatty, Graphic Arts Assoc. of Illinois, Chicago. During the period, September 11 to September 23, 1950, a number of Graphic Arts associations will hold their annual conventions as follows: Intl. Assoc. of Printing House Craftsmen, Hotel Stevens, Sept. 10, 11, 12 and 13, 1950; Intl. Typographic Composition Assoc., Sheraton Hotel, Sept. 14, 15 and 16; Printing Industry of America, Palmer House, Sept. 17, 18, 19 and 20, 1950; National Graphic Arts Education Assoc., Hotel Sherman, Sept. 21, 22 and 23, 1950.

National Printing Equipment Association, Inc. — 1949 meeting to be held at Hotel Biltmore, Los Angeles, Calif. Directors meeting, November 14; Members meeting, November 15. President, R. Verne Mitchell, Harris-Seybold Co., 4510 E. 71st St., Cleveland 5, O. James E. Bennet, Secretary, 140 Nassau St., New York 7, N. Y.

New England Mechanical Conference — 1949 Conference, Hotel Statler, Boston, Mass., October 29 and 30. President, George F. Marshall, Mechanical Supt., Portland (Me.) *Press-Herald-Express.* Secretary-Treasurer, Walter C. Crighton, Comp. Room Supt., New London (Conn.) *Day.*

Northwest Mechanical Conference — 1950 Conference, Hotel St. Paul, St. Paul, Minn. Tentative dates, March 10, 11, 12. President, Joseph J. Cory, Chief Composing Room Machinist, St. Paul (Minn.) *Dispatch* and *Pioneer Press.* Secretary-Treasurer, Ralph Carson, Dunwoody Industrial Institute, Minneapolis, Minn.

Pacific Mechanical Conference—1950 Conference to be held in San Francisco. Date to be announced later. President, Fred Gross, Mechanical Supt., San Francisco *Chronicle;* Secretary for the North, Edw. N. Conley, color press foreman, San Francisco *Chronicle;* Secretary for the South, Fred J. Moyer, Los Angeles *Daily News.*

Pacific Society of Printing House Craftsmen — Annual conference in connection with International convention at San Francisco. Society session scheduled for Palace Hotel, Sunday, September 4, 1949. Secretary-Treasurer, R. W. Hardy, 71 Columbia St., Seattle 4, Wash.

PNPA-NJPA Joint Mechanical Conference — Date and place of 1950 Conference to be announced later. Conference director, Theodore A. Serrill, PNPA Associate Manager, Telegraph Bldg., Harrisburg, Pa.

Printing Industry of America — Hotel Biltmore, Los Angeles, November 13-17, 1949. James R. Brackett, General Manager, 719 Fifteenth St. N. W., Washington, D. C.

SNPA (Eastern Div.) Mechanical Conference — Atlanta Biltmore Hotel, Atlanta, Ga., August 29 and 30, 1949. Chairman, Luther Wright, Mechanical Supt., New Orleans (La.) *Item;* Secretary, Tom Tanner, c-o SNPA, P.O. Box 1569, Chattanooga 1, Tenn.; Chairman of Supply and Equipment Group, Owen W. Asbell, Ludlow Typograph Co., representative in Atlanta, Ga.

SNPA (Western Div.) Mechanical Conference—Chairman, George N. Guthrie, Pressroom Supt., Little Rock (Ark.) *Gazette;* Secretary, C. W. Tabb, 723 Texas Bank Bldg., Dallas, Tex. 1950 Conference dates and meeting place to be determined later by Executive Committee.

Technical Association of the Lithographic Industry — (TALI)—1950 meeting scheduled for second week in April, Rochester, N. Y. President, Michael H. Bruno, Lithographic Technical Foundation, Glessner House, 1800 So. Prairie Ave., Chicago 16, Ill. Secretary-Treasurer, Geo. W. Wilhelm, 814 N. East Ave., Oak Park, Ill.

ANPA Conference

(Continued from Page 38)

creeping at the head, cracked or broken plates, excessive wear on blankets and form rollers. He pointed out that the life of blankets may be reduced from this cause as much as 50%.

After an intensive study of the subject, he came up with a portable fixture weighing about 20 lbs., the refinishing of the cylinder clipways being done by grinding.

Mr. McKechnie explained "Grinding is necessarily slow, especially if wear is excessive, but is thorough and accurate." He explained that in operation of the machine almost finger-tip control is provided. If a grinding wheel breaks while refinishing the ways no damage results.

Mr. McKechnie explained the repair of clips and clamps. Said he: "The clip base is entirely milled off and is replaced with a base of special high quality bronze. Between these two pieces we have shims in varying thicknesses up to 0.030 in. for adjustment purposes. By using clips with an adjustable bronze base each clipway is ground until it is perfect. Then the clips are fitted perfectly to it." Mr. McKechnie asserted that up to the present none have had to be reset after they were finally fitted two years ago at the Toronto *Globe* and *Mail*.

He said: "We have applied a combination of two proved mechanical principles in this work: (1) A ground steel surface is a better working face than any machined surface, and (2) The application of bronze against a ground steel surface provides a better wearing combination. It also makes possible a more perfect fit, as there is no possibility of the two surfaces seizing when set up close."

Requests Literature

AMERICAN equipment and supplies manufacturers are invited to place on their mailing list the library of the London School of Printing. According to Librarian G. H. Wright, the School is endeavoring to make its technical library as complete as possible with respect to information about all sections of the Graphic Arts industries. In addition to catalogs, bulletins, mailing pieces, instruction booklets, price lists, etc., the library particularly would like to have photographs of machinery to incorporate in films and film strips for lecture purposes.

The School Library will be grateful for any literature that can be contributed by American manufacturers, as well as being permanently on their lists to receive all future publications. Please address Technical Library, London School of Printing, 61 Stamford St., London S. E. 1, England.

Newsprint Waste

Earl Weiskittel, not unnaturally, since he was chairman of the session, introduced himself as the next speaker on *Newsprint Waste*. This subject has had a lot of attention at former ANPA Mechanical Conferences. Mr. Weiskittel, however, gave his discussion the "new look." He has had considerable experience in newsprint waste conservation.

"Money lost to newspapers through unnecessary newsprint waste," said he, "adds up to a staggering sum. It is interesting to note that, based on comparative figures of newsprint waste percentages from the start of the ANPA continuing campaign in 1927 to date, those members who participate and report their waste monthly, are now saving approx. $3 million annually. However, constant vigilance is required to keep paper waste at a minimum.

He advised: "One of the first and most important things to remember whenever a campaign of paper saving is started is to get all your personnel throughout the entire organization waste conscious, especially the men who are responsible for the direct handling of the paper.

He observed: "Too many of us think that the only people responsible for waste are the pressmen and their immediate associates."

Mr. Weiskittel cited one instance where the *Vindicator* was receiving rolls from one mill, which, upon arrival had most of the wrappers torn and virtually all of the rolls were cracked to some extent and out of round. Upon investigation it was found that the mill was loading thirty-three 40 in. diam. rolls in a 40 ft. car. The mill was induced to load 35 rolls. Since then the rolls have been received in good shape.

With respect to handling rolls, the speaker stated there still are some men who don't know or care in what direction a roll of paper is moved across the floor, whether it unwinds or is rolled in the opposite direction. One layer of paper from a 40 in. diam. roll weighs approx. 11 oz. If ½ in. of paper is left on a 66½ in. core it weighs 8 lbs. Neglect in this respect adds unnecessarily to the percentage of core waste.

Mr. Weiskittel described his manner of handling newsprint rolls by Elwell-Parker Electric Truck and through the use of dock hydraulic tipping roll unloader.

In the reel room he explained that all rolls are changed simultaneously thus eliminating numerous press stops. This procedure has helped greatly in reducing printed waste to a minimum. He explained: "If we changed rolls individually we would throw out 5 to 8 papers for each splice; whereas now we waste 20 to 25 papers on an 8-roll machine for each complete roll change."

Because a rewinder is used at the *Vindicator* it is possible to change all rolls at the same time. In his opinion, the newspaper of today needs a rewinder. It is a big factor in waste reduction and it is a great time-saver. In addition, every newspaper will receive a certain amount of paper that has been damaged by different causes which are almost beyond control. By using a rewinder, a newspaper can salvage, in the majority of cases, one-half to three-quarters of the total paper that formerly would have been lost.

Unusual Newspaper Color

At the Wednesday morning, June 8 session of the ANPA Newspaper Mechanical Conference an excellent and meticulously prepared paper was given by Clarence Snethen on *Rop Color Printing*. Mr. Snethen is Mechanical Supt. of the Waukegan (Ill.) *News-Sun*. The *News-Sun* circulates to the extent of 25,000 copies daily. Mr. Snethen explained that color is printed in his plant at 18,000 to 20,000 copies per hr. Black running speed normally is 25,000 per hr. Press equipment consists of a 5 unit Goss press which includes two units to handle color. Usually, three units will handle the regular paper. If the paper is over 24 pages, the run is collect. Thus the press crew has a full day in which to tune up the color units for registration and washup.

While Mr. Snethen went into production details very carefully, we will only print that part of his address devoted to the handling of zinc color plates from the time they are received in the composing room.

Every operation in obtaining exact color register is subjugated to the idiosyncracies and behavior of the moisture in the mats from which the stereotype plates are cast.

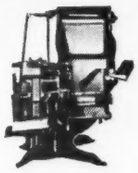
From here on, Mr. Snethen is telling it:

"When the composing room receives the zinc color plates from the engraver the key plate, or black, is based on steel base in a color chase for the stereotype department. Our color chases are 0.916 in. high. Every open space is filled with dead metal to secure uniform shrinkage. If the plate is a zinc, scrap zinc is used; if a type form or stereotype flat cast, 8 pt. Linotype slugs are used. The nearer uniform you keep the amount and location of dead metal, the better control you will have over the mat shrinkage of the four color plates. Too much emphasis cannot be placed on this feature of color stereotyping.

"When the form is OKd and ready to mold, we lock up a piece of 12 pt. full face rule, the width of the page, at the bottom 6 pts. below the page length. The notch shown in the rule is 18 pts. in width and 2 picas from each end. When plates are cast the rule gives a definite guide to measure accurately the shrinkage of each mat or plate. Just before plates are placed on the press, this rule is routed off.

"The form is now placed on the mat roller in the same position as to roll a mat. Then the form is inked and a proof

(Continued on Page 68)



Linotype Research announces

New developments to cut maintenance costs— simplify operation

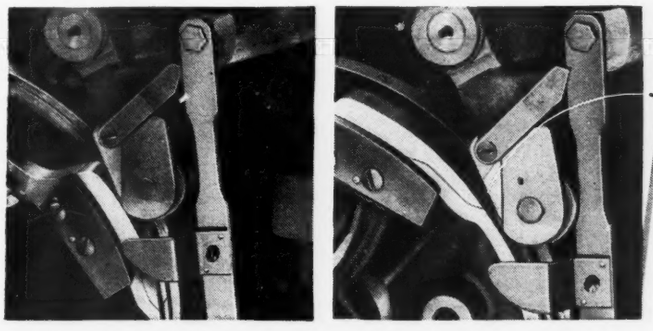
HERE ARE some of the new improvements on Linotypes. These—and many more—are supplied at no extra cost *on all Linotypes now being shipped from the factory.*

There is the new cam construction which completely eliminates wear on the pot pump cam surface . . . the cam roller rides only on hardened-steel shoes, avoiding any maintenance problems; a new adjustment on the pot pump spring allows simple adjustment of the plunger pressure from the front of the machine; the Linolizing* process for molds reduces mold maintenance and makes ejection smoother. These are but a few developments from Linotype Research which help lower your operating and maintenance costs.

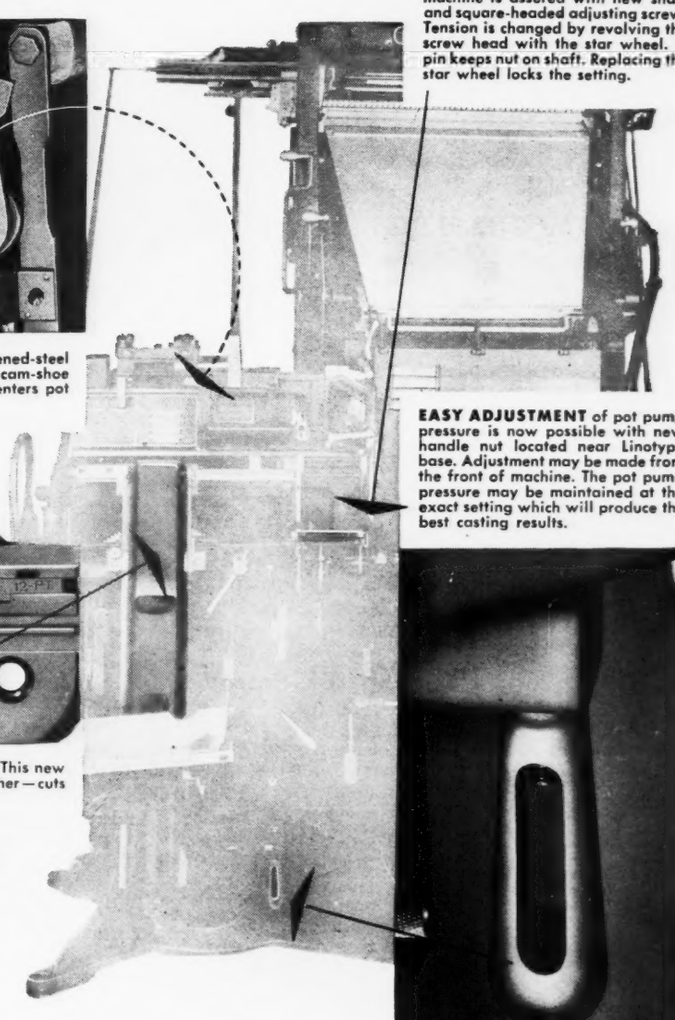
But there are still *more* improvements . . . all designed to cut your costs . . . all resulting from Linotype Research. It is the intensive research carried on in Linotype laboratories which enables your Linotype representative to plan the most efficient composing rooms.

*TRADE MARK—SURFACE TREATMENT

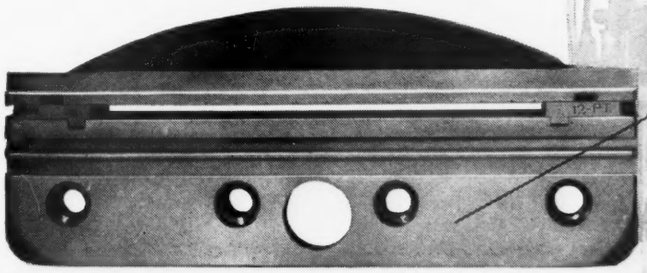
PERMANENT ADJUSTMENT of star wheel friction from the front of the machine is assured with new shaft and square-headed adjusting screw. Tension is changed by revolving the screw head with the star wheel. A pin keeps nut on shaft. Replacing the star wheel locks the setting.



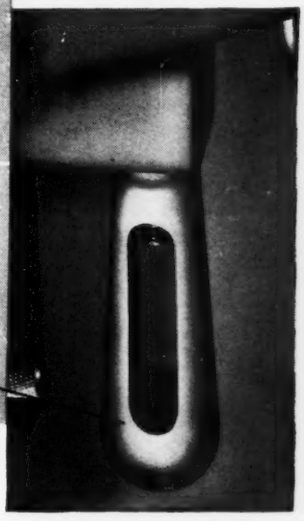
TO REDUCE WEAR, pot pump cam roller makes contact only with hardened-steel shoes—surface wear of the cam is eliminated. The plunger is raised by cam-shoe action but returns to normal position before casting—no additional air enters pot throat. The photos show the roller in both lifted and contact positions.



EASY ADJUSTMENT of pot pump pressure is now possible with new handle nut located near Linotype base. Adjustment may be made from the front of machine. The pot pump pressure may be maintained at the exact setting which will produce the best casting results.



TO CUT MOLD MAINTENANCE, all Linotype molds are now Linolized. This new process prevents metal from fusing to molds and makes ejection smoother—cuts matrix damage. Linolizing is free on all new Linotype molds.

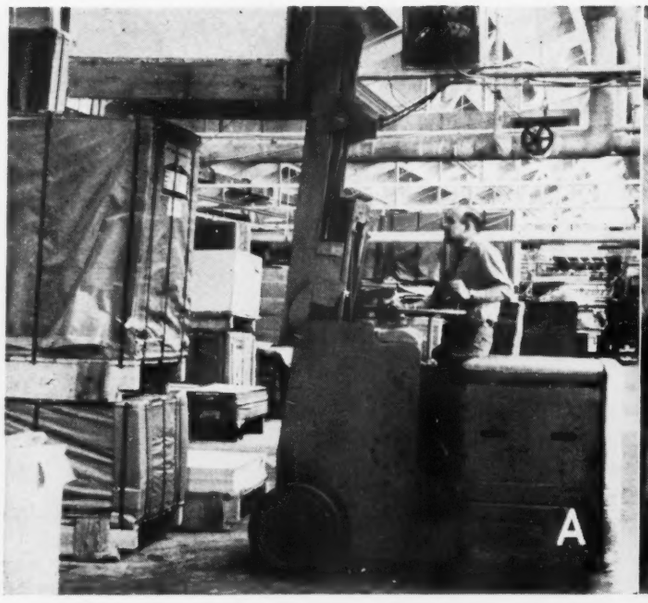


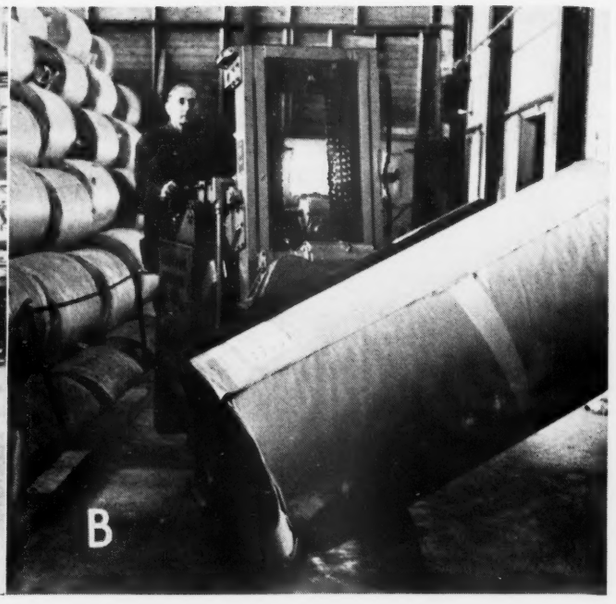
MERGENTHALER LINOTYPE COMPANY
29 Ryerson Street, Brooklyn 5, New York

LINOTYPE

LEADERSHIP THROUGH RESEARCH

Set in Linotype Times Roman, Erbar Bold Condensed and the Spartan Family





Paper Handling Problem Solved — Facing the problem of handling approx. 72 million lbs. of paper annually, Kable Brothers Co., publication printers of Mount Morris, Ill, has installed a fleet of storage battery-powered trucks. By doing so, states the company, effort on the part of employees has been reduced and there has been a decrease in the amount of paper damaged in handling operations.

The photo at left pictures an electric fork truck in operation as it stacks a skid of paper on tiers, two to three high. More than 200 million magazines, plus thousand of brochures and catalogs, are produced at this plant each year.

The picture at right shows a rotating head on an electric industrial truck turning a roll of paper from vertical (in which position it was shipped in railroad box car) to horizontal for handling by overhead crane on to stacks in paper storage pits. These trucks are fitted with a spade toe to hold the roll at one end. Two sets of storage batteries are maintained for each truck in the fleet, one being on charge while the other set is in use.

Patents

For The GRAPHIC ARTS

Covering patents issued March 15, March 22, March 29, April 5, April 12 and April 19.

New patents for the Graphic Arts are reported exclusively for Printing Equipment Engineer by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issued each week. Printing Equipment Engineer is the only trade publication in its field offering a report based on this coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

Binding, Cutting, Perforation

2,465,210. AUTOMATIC STOP-CONTROL DEVICE for wire stapling mechanism is primarily designed for use in automatic printing machines in the commercial printing of books and the like. By spring-pressed feelers controlling a solenoid, device stops printing machine instantly when the feed of the staple wire to the stapling mechanism is interrupted for any reason. In the case of printed products requiring two or more staples, it is sometimes undesirable to avoid stopping the machine; the device can selectively neutralize operation of the stop mechanism as to either of the staple wires. Instead of stopping machine a warning is automatically sounded when feed of stapling wire is interrupted. To accomplish this a manual switch is provided to short circuit the solenoid which acts under influence of stop-control to stop press. Since the manual switch does not short a circuit containing a bell or the like, the bell is sounded upon the failure of one wire feed. Invented by Lewis H. Dickey, Milton, Mass. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application January 2, 1945. 6 claims.

Composing Room Equipment

2,465,657. TYPING AND JUSTIFYING MACHINE as described is embodied in a Varityper. It provides a justifying mechanism for a typewriting machine equipped with a differential spacing control, whereby the carriage feed may be advanced according to the various widths of the different characters, and at the same time the lines may be justified to uniform length, by varying only the spacing between words, and not the letter spacing. Differential spacing may be used for different sizes of type. Invented by Charles W. Norton, West Orange, N. J. Assigned to Ralph C. Coxhead Corp., New York, N. Y. Application November 19, 1945. 20 claims.

Feeding, Folding, Delivery

2,466,544. APPARATUS FOR STACKING AND CONVEYING OBJECTS is adapted to receive carton-blanks or similar sheet-like articles as they are discharged from a processing machine. It counts and stacks the articles in groups or piles of certain numbers and then transfers the stacks on a conveyor belt to a location where they may be further processed or tied in bundles for shipment. The apparatus is adjustable to accommodate objects of different dimensions, both transversely and longitudinally, and also adjustable for varying the number of objects deposited in the stacks. The entire operation of counting, stacking, and transporting is carried out under high speed. Invented by George H. Harred, East Greenwich, R. I. Assigned, by mesne assignments, to Bostitch, Inc., Westerly, R. I. Application October 12, 1946. 11 claims.

2,466,862. METHOD OF FEEDING AND REGISTERING SHEETS in lapped sequence is disclosed. The method can be applied with advantage in connection with an oscillating type of sheet transfer mechanism whereby during the return movement the sheet carrying elements, which transfer the registered sheets from their support to an impression member of a printing press, or to a sheet carrying member of any sheet handling machine, are projected into and beyond the path described by a transferred sheet immediately after the trailing edge has passed over and beyond the sheet registering means. Invented by Henri E. Peyrebrune, River Forest, and Bruno B. Pasquinelli, Chicago, Ill. Assigned, by mesne assignments, to Miehle Printing Press and Manufacturing Co., Chicago, Ill. Application April 12, 1947. 10 claims.

2,467,423. SHEET DELIVERY APPARATUS is provided which operates to slow down the velocity of successively delivered relatively stiff and unbendable blanks cut from a traveling web of paperboard in the manufacture of corrugated paperboard. Sheet retarding rollers are used to slow down the blanks after being cut from the web and as they travel to a receiving stand,

SWITCH TO
Mercury Products for finer quality...

● You're always sure of finer reproduction when you use Mercury rollers and blankets. This superior performance is the result of elaborate research conducted to determine the perfect consistency for the coatings of these accessories. Through these experiments, new coatings have been developed that combine great ink-carrying capacity with the ability to release ink at the exact instant of contact. They assure a sharper, more distinct appearance in every job you turn out.

FOR ALL GRAPHIC ARTS PROCESSES

RAPID ROLLER COMPANY

D. M. RAPPORT, Pres. Federal at 26th Street CHICAGO 16

truck, or conveyor from whence they are conducted to a further operation. Apparatus may be applied to the delivery of other sheets in so far as the operating conditions and requirements may be analogous. Invented by Hobart W. Bruker, Bordentown, N. J. Assigned to George W. Swift, Jr., Inc., Bordentown, N. J. Application March 19, 1945. 4 claims.

Printing Presses and Equipment

2,464,849. COATING MACHINE embodies a support having perforations in its upper face, across which paper is adapted to be moved. A V-shaped trough has a slot in its lower end through which a coating of pigment may be discharged. Trough is adjustably supported above the support in such manner that the thickness of the coating on the paper may be regulated. There is an adjustable partition with the trough by which coating material may be confined to a restricted area. Trough may have a number of compartments and partitions whereby paper may be coated in a number of colors and in varying widths. Invented by William H. Coward, New Rochelle, N. Y. Unassigned. Application July 26, 1945. 1 claim.

2,465,252. PRINTING PLATE STOPS FOR SPIRALLY GROOVED CYLINDERS are intended to prevent any slight circumferential creeping or shifting movement of the printing plates of a rotary printing press due to the crowd of printing pressure on the plates. Blade-like stops are seated in narrow straight grooves which intersect the spiral grooves in the cylinder. The narrow straight grooves are parallel with the axis of rotation of the cylinder, and the grooves are arranged in pairs so that the plate stops may be used as driving stops for clamping rear edges of circumferentially longer and shorter full length plates, as bleed and non-bleed plates, to the cylinder. Stop clamps may be moved along spiral grooves to engage driving stops to clamp them to cylinder at intersections of spiral and straight grooves. Manually operated locks secure clamps to cylinder in stop locking positions. Invented by Joseph E. Meyer, Westerly, R. I. Assigned to C. B. Cottrell & Sons Co., Westerly, R. I. Application February 1, 1946. 7 claims.

2,466,472. CHUCK is useful in centering and fastening a printing roll on a supporting shaft of a printing press. The invention provides a chuck including a collet, clamping member, and an operating ring controlling the collet and clamping member in such a manner as to enable the operating ring to effect the necessary clamping operation with a maximum leverage. Invented by Charles Everett Oster, Rochester, N. Y. Unassigned. Application December 26, 1947. 12 claims.

2,466,603. INK DISTRIBUTION FOR ROTARY PRINTING PRESSES. Patent discloses in an ink distribution, a fountain roll, its shaft, shaft extensions operatively connected thereto, means for driving the fountain roll through one of the shaft extensions. The said means comprises a distribution drive shaft, an intermediate drive shaft operatively connected to the shaft extension, a hollow shaft mounted on the distribution drive shaft, and a manually operated means for operatively connecting the hollow shaft to and disconnecting it from the distribution drive shaft. Invented by Hans J. Luehrs, Westerly, R. I. Assigned to C. B. Cottrell & Sons Co., Westerly, R. I. Application December 11, 1945. 21 claims.

2,466,968. DRIVE FOR IMPRESSION CYLINDERS OF MATRIX ROLLERS. A gear train is provided between the large gears on the ends of the upper and lower rolls, whereby the gears of the train will be in constant perfect mesh irrespective of the adjustment of the upper roll for effecting variations in chase, blanket and mat thicknesses. The construction provides a positive drive and causes the chase and mat to enter the impression roll but, after the chase and mat are once entered thereunder, the impression roll will be free to rotate exactly in step with the surface speed of the chase and mat. Invented by William P. V. Ross, Battle Creek, Mich. Assigned, by mesne assignments, to Goss Printing Press Co., Chicago, Ill. Application October 14, 1946. 4 claims.

2,467,097. APPLICATOR FOR PARTICULATE MATERIAL. Apparatus is intended for employment in the application of absorptive powders for offset elimination in printing. A vibratory sectional hopper for dry coating material includes a series of compartments each having a perforated bottom and confining side walls. The hopper is superimposed over a vibratory sieve. Sieve and hopper are vibrated in op-

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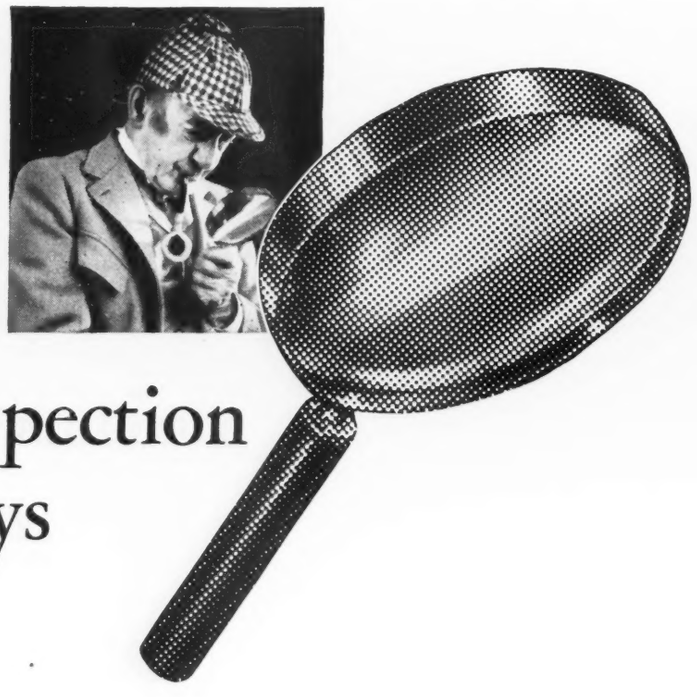
posite directions. Needle valves in perforations of hopper bottom regulate flow of material therethrough and onto sieve beneath. A stationary overhead support is provided for the needles and each needle is pivoted for rocking movement relative to support to accommodate to the vibratory movement of the hopper. Invented by George F. Rooney, Jr., Cincinnati, Ohio. Unassigned. Application April 3, 1946. 10 claims.

2,467,128. AUTOMATIC MULTIPLE COLOR PRINTING PLATE AND INKING MEANS. An automatic multiple color printing plate of the flat plate type is operable on a bed and platen press to print a plurality of colors, simultaneously from one impression of the plate. Plate includes a plurality of parallel movable strips for mounting printing elements. The strips are horizontally opposed to a vertically operated inking means and have clearance slots and apertures with contact lugs extending inwardly, the lugs on separate strips being staggered. Lugs provide selective contact with operating cams intersecting the apertures, providing means to coact the printing elements with selective inking means. Suitable mechanism is provided for mounting a plurality of standard ink rollers in coaction with the movement of the parts of the printing plate. Invented by William H. Hancock, Los Angeles, Calif. Unassigned. Application November 13, 1945. 14 claims.



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2,467,199. INK TRANSFER MECHANISM is so designed that ink is transferred effectively from one roller to the other without inpairing the surface of the respective rollers. The mechanism also allows the relationship between the surface of the transfer roller and the surfaces of the other rollers which the transfer roller contacts to be effectively controlled to afford a variable and controllable time of contact between them. A means is provided to prevent simultaneous frictional engagement between the surfaces of the various rollers. Invented by Harry W. Faeber, New London, Conn. Assigned to Time, Inc., New York, N. Y. Application March 29, 1945. 10 claims.

2,467,618. MULTIPLE PRINTING MACHINE. Patent discloses, in a printing machine, an inking mechanism having an inking plate on both sides of and in close proximity to the type. The two inking plates supply the inking rollers with ink, thereby enabling the inking rollers to deposit an even coverage of ink on the type form. There is an ink fountain, an auxiliary inking roller to convey ink from the ink fountain to the inking plate nearest the ink fountain. A breaker plate is disposed between the ink fountain and the inking plate for more evenly distributing the ink to the inking rollers which are vertically adjustable. Invented by John L. Goines, Albert C. Goines, and Charles S. Goines, Charlotte, and Roy R. Howard and George S. Holland, Concord, N. C. Assigned to John L. Goines, Albert C. Goines, and Charles S. Goines. Application May 9, 1944. 1 claim.

Covering patents issued April 26, May 3, May 10, May 17, May 24 and May 31.

Binding, Cutting, Perforation

2,471,482. MACHINE FOR PRODUCING A SERIES OF PARALLEL CREASES OR CORRUGATIONS IN PAPER, FABRIC, OR THE LIKE is disclosed. It is useful in connection with a "back strip" operation which is an operation carried out in the binding of books during which a strip of calico or other suitable material is glued as a lining to the spine of a book. With the device described, the corrguations introduced into this lining provide the necessary extra material for the subsequent rounding and backing operation during which the strip lining resumes its original smooth form, the corrugations being drawn out to the expansion of the back spine. These corrugations enable the book to be spread during rounding and backing without fear of splitting the lining on the back of the book while giving the book a greater degree of flexibility. The apparatus consists of a freely rotatable cylinder with circumferential grooves. It is adapted to be rotated by the traction of sheet material over its periphery. Several freely rotatable finned rollers are parallel with the cylinder, the peripheral fins of which engage with the grooves of the cylinder to produce creases in the material. A support for the rollers partly surrounds the cylinder. The rollers may be moved to and from creasing position. Invented by Lionel John Bryant Rushent

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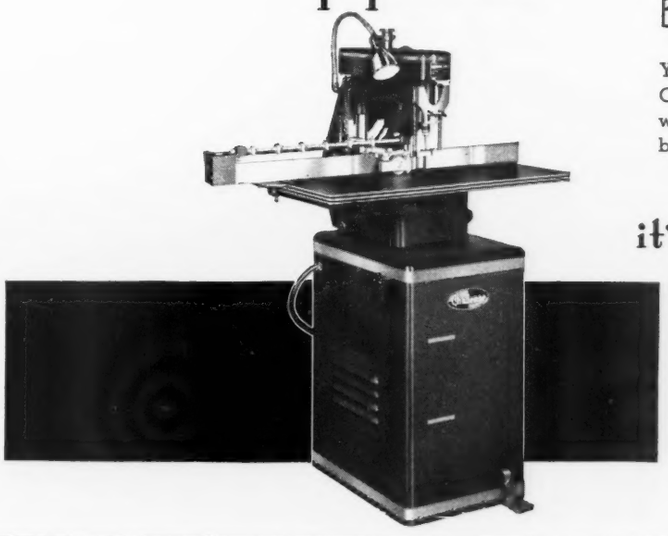

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French, London, England. Assigned to The Book Machinery Co. Ltd., London, England. Application November 1, 1946; in Great Britain December 6, 1945. 4 claims.

Composing Room Equipment

2,470,437. PRINTING FORM ALIGNING APPARATUS aligns electrotypes on so-called "honeycomb" base or conventional printer's chase having cylindrical or frusto-conical apertures. An electrotype is first placed on the chase and locked by ordinary methods in the approximate position it is to occupy. It may then be more accurately placed or other electrotypes may be aligned with same with the device of this invention. Two long strips of metal are slotted throughout most of their lengths so as to receive fasteners by which the strips are attached to the chase apertures, one on each extreme side of the chase, placement being aided by the use of a scale. The strips also carry spaced, aligned posts throughout their lengths. A piano wire slidably carrying clamps suitable for reception on the posts is then stretched from one strip to the other, being placed on the posts which are closest to the base of the electrotype.

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The electrotype may then be moved so that its base coincides with the wire and other electrotypes may be added. If necessary, two sets of the aligning devices may be used, one arranged perpendicularly to the first one so that electrotypes may be aligned horizontally as well as vertically. Invented by Albert J. Hoerth, Des Plaines, Ill. Unassigned. Application July 26, 1946. 4 claims.

Feeding, Folding, Delivery

2,468,236. STRIP FEEDING MACHINE. Invention is useful for advancing printed or woven labels to a cutting machine, or for feeding material in proper registry to a printing press or embossing machine. The feeder uses a slide plate which is reciprocally mounted upon a support. The web or strip is fed over a work table and the slide plate and is held by a clamp finger which clamp is slidably and rockably mounted on the slide plate support but independent of same. The clamp finger may be manually raised and lowered by an operator relative to the slide and work table so that different thicknesses of material can be accommodated and for original placement of a web. Such clamps are operated in timed relation from a driving cam shaft, which shaft is adapted to be operated in proper timed relation direct from the printing or cutting machine. The unit can be manufactured as an attachment for a cutting or printing machine or can be built into the original machine structure. Invented by Harold E. Rue, Wauwatosa, Wis. Unassigned. Application February 15, 1946. 13 claims.

2,470,754. FOLDING MACHINE. The invention is particularly useful in a sheet folding machine which has a plurality of drop knives which operate in succession on sheets of paper, or the like, passing through the machine to provide a plurality of folds in the material in the production of a signature. The invention provides a folding machine with a device to stop the motor operating the machine in the event a sheet fails to reach proper position at a folding station below a drop knife. It permits the machine to continue its normal operations as long as sheets are properly passing therethrough. Invented by Myron D. Alber, Alexandria, Va. Unassigned. Application April 25, 1947. 3 claims.

2,470,762. FOLDING MACHINE. Device is for use in a folding machine which has knives for folding paper and a perforator for paper. The improved device comprises a safety switch for the electric circuit of the driving motor. Other apparatus is disclosed for controlling the switch which operates to stop the machine in the event a sheet fails to travel normally through the machine. Invented by Leo R. Dickenson, Washington, D. C. Unassigned. Application April 25, 1947. 4 claims.

Miscellaneous

2,469,671. METHOD OF STENCILING WITH SECTIONAL SCREENS. Invention provides a method of producing a plurality sheet poster by the silk screen process in which subtle shading of an image on the poster is adapted to extend over any number of separately printed sheets without apparent undesirable and improper differences along the matching edges of the parts of the image printed on the adjacent pairs of such sheets. Invented by Walter T. Warde, San Francisco, Calif. Assigned to Foster and Kleiser Company, San Francisco, Calif. Application July 30, 1945. 3 claims.

2,469,900. PAPER DRILL SHARPENER does not require that drill be removed from its spindle to be sharpened. A base is supported below the hollow end of the drill and a sharpening tool is mounted in the base. Tool is moved into sharpening relation with the lower end of the drill while the drill is rotated in its spindle. Outer surface of drill is supported against two rollers opposite the working portion of the tool. Invented by William R. Spiller and Lloyd L. West, Dayton, Ohio. Assigned to the Harris-Seybold Co., Cleveland, Ohio. Application October 12, 1945. 13 claims.

2,470,926. ELECTRONIC COUNTER. Invention provides an electronic counter arranged to convert short electrical impulses set up by objects moving at high speed into impulses of longer duration that allow for the inertia of the mechanical parts of the counter and are capable of operating the mechanical parts. The arrangement is particularly suitable for high speed counting, including those articles which are too light in weight to actuate a conventional switch or trigger. In-

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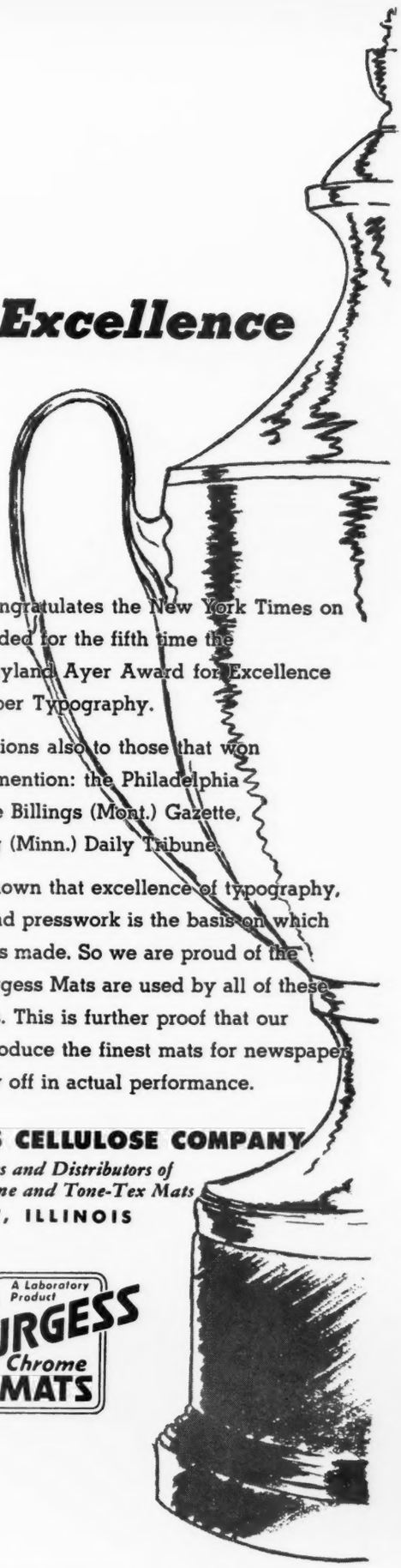

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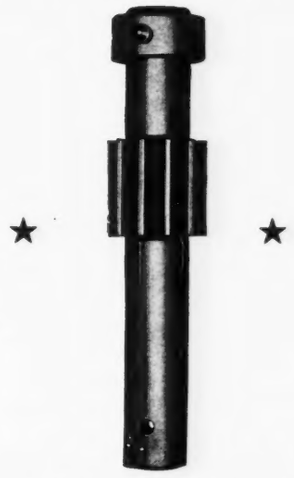

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vented by Werner A. Gieseke, Danville, Ill. Unassigned. Application February 27, 1946. 10 claims.

Plate Making

2,468,460. PLATE BURNER. An improved infra-red radiantly heated plate burner is particularly adapted for use in photoengraving. The apparatus horizontally moves an exposed and developed photoengraving plate into a heated zone with a minimum of effort on the part of the operator. Two horizontally extending series of infra-red radiant lamps are enclosed in a cabinet. The cabinet has a narrow slot along one side through which the plate carrying carriage slides to move the plate between and away from the lamps. Invented by Frank T. Powers, Glen Cove, N. Y.; Frank T. Powers, Jr., and John M. Powers, executors of said Frank T. Powers, deceased. Assigned to Powers Photo Engravers Co., New York, N. Y. Application January 14, 1947. 2 claims.

2,468,680. HALFTONE SCREEN FOR USE IN THE MANUFACTURE OF PRINTING PLATES. Halftone screen is for use in photo-reproduction processes. It comprises two plates of transparent material having faces arranged in juxtaposition, gelatinous material defining lines on the adjacent surfaces of the plates. Lines are in intersecting relationship. Gelatinous material is dyed with a water solution of fuchsine to render it impervious to visible photographically actinic light including a plurality of colors while remaining transparent to ultra-violet light. Invented by Walter S. Marx, Jr., Santa Barbara, Calif. Assigned to Printing Arts Research Labs., Inc., Santa Barbara, Calif. Application July 2, 1948. 7 claims.

2,469,689. METHOD OF MAKING AN APERTURED SHEET of composite copper and nickel layers is disclosed. It comprises forming in the same zone on both sides of an imperforate copper sheet, non-conductive colloid stencils covering both sides of the copper sheet where aperture is required. Thin layers of nickel are deposited on the parts of both sides of the sheet not protected by the stencils which are then removed. Copper sheet is made the anode in a copper plating bath and current is passed between the anode and a cathode until copper at the parts of the copper sheets where the nickel is absent is removed to a greater width than the width of the aperture in the nickel foil. Invention can be used to make invert half-tone printing forms for printing in intaglio. Invented by Donald C. Gresham, Wealdstone, England. Assigned to the Eastman Kodak Co., Rochester, N. Y. Application March 23, 1945; in Great Britain March 25, 1944. 2 claims.

2,469,891. COLOR SEPARATION CAMERA. Camera is provided for making highly corrected color separation negatives of colored subjects to be used in making process halftone printing plates. At the rear of the camera is provided means for supporting a sensitized element in a plane normal to the lens axis. Successive sensitized elements may be substituted one for the other, for the exposure of the several negatives, and at the same time accurate location of the several plates in the same focal plane is insured so that all of the images are of equal size and definition. Between lens and sensitized element a mask is supported and alternately a compensating transparent sheet may be brought into the path of the light. Negatives can be produced efficiently and with only a moderate degree of

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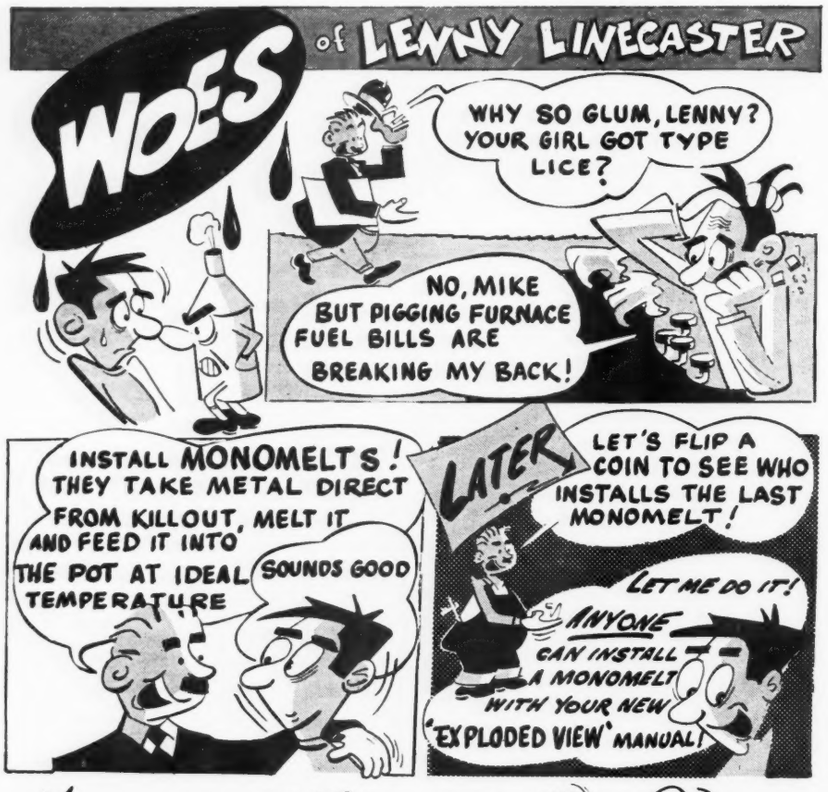
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care. Invented by Frank T. Powers, Glen Cove, N. Y., Augustin J. Powers, Jr., Roslyn Heights, N. Y., and Francis E. Wattier, St. Lambert, Quebec, Canada. Assigned to Powers Photo Engraving Co., Glen Cove, N. Y. Application September 14, 1945. 12 claims.

2,470,146. A MACHINE FOR CASTING SEMI-CIRCULAR STEREOTYPE PLATES provides for slot-shaped recesses on the inside face of the plate to receive hooks on the supporting cylinder to which the stereotype plate is attached. It includes a concave casting member for supporting a matrix and a convex core member cooperating therewith to provide a molding space between the members. The convex core member can be rotated. A pair of trunnions carried by the convex core member project from one end thereof. Double ended hooks are operated by the trunnions. A fixed head at one end of machine carries cam operating means for engagement with respective cams carried at the outer end of each trunnion. Hooks are operated into and out of the molding space by their respective cams. The hooks form slots in the plate. Invented by Curtis S. Crafts, Oak Park, Ill. Assigned to The Goss Printing Press Co., Chicago, Ill. Application July 15, 1944. 4 claims.

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Printing Inks and Related Chemicals

2,468,633. INKS FOR LETTERPRESS PRINTING are essentially alkaline casein-resin dispersions of an insoluble pigment in a concentrated aqueous sugar solution, usually containing a suitable hydroscopic agent which may be a polyhydric alcohol such as ethylene glycol, glycerine, sorbitol or the like. Soy bean protein may be substituted for the casein. Carbon black and Lithol Red pigment are used. Invented by Vincent A. Lauderman, Hamilton, Ohio. Assigned to The Champion Paper & Fibre Co., Hamilton, Ohio. Application July 10, 1945. 6 claims.

2,468,779. TYPOGRAPHIC PRINTING INK is characterized by its ability to be set by the application of water to the film and by its stability at high humidities. It consists of a pigment dispersed in a vehicle. The vehicle contains as binder a resinous glycerol ester of endo methylene tetrahydrophthalic acid dissolved in a liquid water-soluble solvent of the group consisting of polyglycols and their mono-esters. Invented by Charles A. Rietz, Park Ridge, Ill., and Raymond F. Lecture, Chicago, Ill. Assigned to the Interchemical Corporation, New York, N. Y. Application April 28, 1945. 2 claims.

For Patent Research in the U. S. Patent Office, or a prompt estimate on any type of search, address INVENTION, INC., Munsey Bldg., Washington, D.C.

Printing Presses and Equipment

2,468,400. POROUS PRINTING CYLINDER. A printing roller is provided in which the ink, dye or pigment is expelled or permeates through the material of the roller to the printing surface thereof, as distinguished from being applied to the printing surface by means of inking rollers. Inking rollers and their operating mechanisms can be eliminated to lower the cost of the printing apparatus. The cylinder may be made of unglazed hardened clay, plastic or other material; it includes an inner tube having grooves or flow channels for applying ink to the inner surface of the porous tube. Invented by William C. Huebner, New York, N. Y. Unassigned. Application May 12, 1945. 11 claims.

2,469,796. INKING MECHANISM FOR PRINTING MACHINES is especially adapted for machines used for printing newspapers. The invention discloses an ink pump and associated devices for use in selectively supplying a plurality of kinds of ink under pressure to an ink distributing cylinder in regulated quantity. The amount and color of ink supplied to each of a plurality of sections of a printing form may be varied as required by the matter to be printed. Mechanism may be quickly cleaned when it is desired to change inks. Invented by Anton Stobb, Westfield, N. J., and Alexander J. Albrecht, West New York, N. J. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application January 16, 1945. 17 claims.

2,470,243. A PRINTING ASSEMBLAGE is adapted to operate at comparatively high speeds to print various types of ribbon stock that includes ordinary relatively heavy material, thin and frail tissue stock, gummed Scotch tape, silk rayon textile ribbon and the like. The press will perform either single or multi-color work and produce accurate registration of the superimposed impressions. It may be used with analine, water, tar, and oil base inks, and eliminates the necessity of employing more costly mill run printing in the production of labels, tabs, and other strip printed items. Invented by George O. Frostad, Milwaukee, Wis. Unassigned. Application April 16, 1945. 7 claims.

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***Two* PRODUCTS**

The first of these is **BOOTH'S ZINK CUT CEMENT**—the best known method of quickly mounting cuts and holding them fast. And you can get it in the United States for

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"REGAL"

by NEW ENGLAND

Keep the name of this new MONOCORK in mind when you are looking for the finest in Cylinder Packing.

The Success of this Blanket has been astounding!

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New York City Office:
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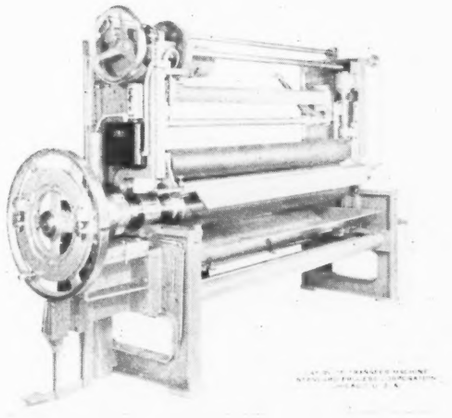

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Manufactured in a wide range of sizes for transferring carbon tissue in perfect register to any number of cylinders. This is accomplished by means of a definite key between copy and cylinder, a positive method of fixing the cylinder in the machine and a device for checking accuracy of its position so it can be re-positioned any number of times. A lock on the dividing head secures the cylinder in position. The rubber impression roll is raised and lowered by a gear motor with pressure against the cylinder regulated by an adjustable control. Equipped with counter-balanced register bar, Vernier scale and scribe.

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Manufacturing Gravure Equipment & Supplies

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Mechanical and production executives are invited to submit to the editor mechanical or production helps which have been devised in their plants. Our readers will be glad for the information.

If you do not have copy of our Red Catalogue No. 8, —Newspaper Equipment and Supplies for printing newspapers—your copy is Ready. Send for it now.

AMERICAN PUBLISHERS SUPPLY, INC.
P. O. Box 421, Lynnfield, Mass.

ANPA Conference

(Continued from Page 54)

is pulled on a cellophane sheet. After the proof is pulled, it is dusted on the printed side of the cellophane with talcum powder. This dries the ink at once, so as not to delay the stereotypers. The cellophane used by the *News-Sun* is 0.012 in. thick.

"Next, we register the cellophane over the key form in the chase and place thumb tacks at the head of the chase, in the holes drilled into it. Great care is taken to get perfect register as this is our key sheet to be used throughout the registering procedure in the composing and stereotype departments.

"When we are sure of perfect register the thumb tacks and cellophane are removed and the mat for the black is rolled. We next put the cellophane back on the chase and replace the thumb tacks and check our register. By doing this, we can see whether the ad plate shifted while being rolled. We do this before and after rolling each mat. If care is taken to secure perfect register between all colors, much trouble and many hours of registering are saved when plating up the press. The same chase and lockup are used for all colors.

"In rolling, mats are used from the center of a fresh bundle as the moisture content will be more uniform. Our procedure is to roll two mats of each color. If one is spoiled in casting, another one is handy, thus eliminating the necessity of re-registering the forms again in the composing room.

"Our molding combination is a ¼ in. hard cork and a hard composition board, 0.115 in. thick. We use no creeper and our mat roller is the conventional type.

"I know it sounds incredible to many of you, but we are controlling the shrinkage of dry mats in our color work. The fact that we do exactly this is demonstrated by the hairline register of all our color work.

"In backing up color mats, we are careful to pack each mat exactly the same. This is another factor which helps keep the mat shrinkage uniform.

"Before scorching the mats, we examine each color carefully and select the one that will shrink the least. We prescorch all mats before putting them in the Sta-Hi former. We take the mat selected as one with the least amount of shrinkage and pre-scorch.

"During the pre-scorching the rule at the bottom of the page is measured until the mat has shrunk as far as possible. A trammel gauge or bar compass is used for all measuring as it can be locked in position. We have enough of the gauges so that a gauge can be set for each operation. All mats pre-scorched are shrunk to the exact gauge we have set up from the first mat pre-scorched.

"The bottom rule of each mat is measured as it is taken from the Sta-Hi. It is sometimes necessary to replace the mat into the Sta-Hi, for all mats must measure exactly the same. Another bar compass is set up for the mats in the Sta-Hi.

"In casting, each plate is measured on the bottom rule with another bar compass and therefore each plate is identical in width.

"We do not cool color plates by using the water chamber of the Pony Autoplate. We set them on the floor and let them cool slowly.

"The first two casts of each plate are discarded and each following plate is measured carefully to secure accurate register.

BETTER
FASTER
MORE PROFITABLE PRINTING
75,000 FOLDING CARTON BLANKS PER HOUR!
Send your production samples, let Champlain show you how to do the job — better, faster, more profitably.
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3-5/0 2-color

MIEHLE LETTERPRESSES

- GOOD CONDITION
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- EXTENSION DELIVERY
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PRICED TO MOVE!

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Printing Equipment Engineer

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"LINSCO" STAINLESS STEEL LINERS

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Quiet, smooth-running, efficient. Offset design allows quick pinion change and ready adjustment . . . and too, the Cushman Motor is lower in price. The . . .

CUSHMAN *Offset* MOTOR
is the right power plant
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Write for booklet giving more information

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CHICAGO • MINNEAPOLIS • DENVER

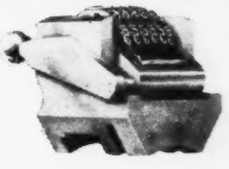
She thinks Howard
is the "Dearest Boy"

He is so prompt in his deliveries, so courteous and friendly. Sometimes she had to speak sharply to the boy that delivered last year, on account of tardiness—but never to Howard—Her husband is an advertiser whose growing account may reflect her enthusiasm . . . Incidentally, Howard started about the time that the stereo department quit experimenting and decided to stay with Certifieds.

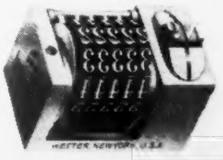
For dependable stereotyping, rely on Certified Mats
Certified DRY MATS
CERTIFIED DRY MAT CORPORATION, 9 Rockefeller Plaza, Dept. M, New York 20, N. Y.

Count On WETTER NUMBERING MACHINES
FOR IMMEDIATE DELIVERY

We appreciate your waiting for Wetter Numbering Machines. Once again they are in stock and you can order your Wetter today—get delivery right away.



Whether you need new numbering machines for your old presses or to round out your new equipment, you'll find a complete line of Wetter machines for either rotary or flat bed presses to meet your exact requirements. It will pay you to count on Wetter for dependable service when it comes to numbering for profit. Send for free descriptive folder today.



WETTER
NUMBERING MACHINE COMPANY
5462 Atlantic Ave. & Logan St., Brooklyn 8, N. Y.

OVER ONE HUNDRED YEARS OF ROLLER MAKING

SAM'L BINGHAM'S SON MFG. CO.
MANUFACTURERS OF
PRINTERS' ROLLERS
LITHO-OFFSET ROLLERS

THERE'S A FACTORY NEAR YOU:

ATLANTA 3	DES MOINES 2	KALAMAZOO 12	OKLAHOMA CITY 6
CHICAGO 5	DETROIT 10	KANSAS CITY 6	PITTSBURGH 3
CLEVELAND 14	HOUSTON 6	MINNEAPOLIS 15	ST. LOUIS 2
DALLAS 1	INDIANAPOLIS 2	NASHVILLE 3	SPRINGFIELD, O.

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NEW BUILDINGS • MODERNIZATION
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ROBERT W. DICKERSON
2063 EAST 4TH STREET • CLEVELAND 15, OHIO

"Each color plate is marked as it is cast with the number of cast on the back of the plate. For example: the first red plate cast is marked on the back of the plate, "Red 1." The next plate cast, "Red 2," etc.

"By these marks the pressman can easily assemble a complete series for plating up. This removes any chance of variation between the casts.

"All of these steps are followed with great care and accuracy, for that is the only way the shrinkage of dry mats can be controlled. It is a job that cannot be rushed if you are to get perfect register on all color plates.

"In routing color plates, we use a 1/16 in. router bit and, in close spots, a 1/32 in. bit. Larger bits have a tendency to pull the surface of the plate and thus throw them slightly out of register.

"While stereotypers are making the color plates, the press crew has been washing up the rollers and setting up the leads. The portable ink fountains have been filled and attached and the press is all ready for plating when the plates reach the pressroom.

"In plating up and registering, we first put on the black plates in correct position with respect to margins.

"Then the yellow plates are put on and the yellow registered into the black. When it is in register, the rollers are lifted from the yellow plates and the reds are put on and registered into the black. Then the rollers are lifted from the red and the blue plates are registered into the black.

"In printing color on rotary presses, it is important that the light colors be printed first with the black printing last. If black is printed first, it bleeds off into all the lighter colors, giving them a muddy appearance.

"The plates should now be in register except for a little compensation at the heads. All rollers are dropped and enough copies are run to reach the press speed which we expect to print the edition. From these printed copies, any corrections are made.

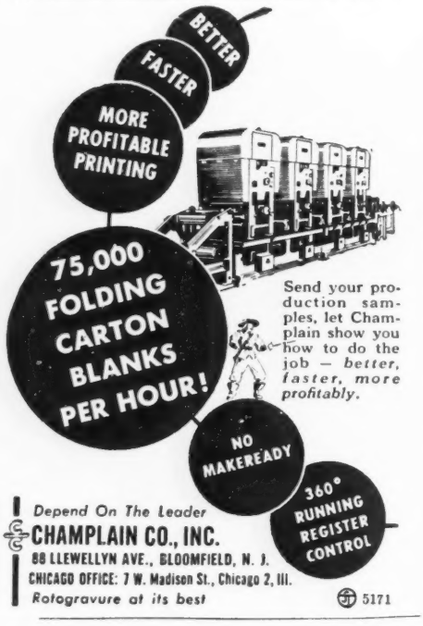
"When there are only a few spots of color on a plate, we undercut the plate 0.006 in. to 0.009 in. so as to avoid punching, to avoid breaking the web and damaging blankets.

"If any shimming is necessary, we use cardboard or strip of mats. We do not use metal shims for if one comes loose, it may damage the plate."

Direct Pressure Molding

Wallace Wood, Stereotype Foreman of the St. Louis *Star-Times*, discussed *Direct Pressure Molding*. He described stereotype molding operations in his plant. He said: "Since we have been using the direct pressure machine our printing has improved so much it would be impossible to go back to roller mats."

Mr. Wood related that he had experimented with about everything in trying to find a satisfactory direct pressure press molding combination. He asserted the cork blanket was "out". He said he has always tried for a hard combination. He then told about settling for one combination which, however, is not completely satisfactory. This combination consists of a 0.062 in. Eastern deep mold creeper next to the mat; then a Tingue-Brown 0.062 in. foundation blanket; a 0.025 in. hard red pressboard; another Tingue-Brown foundation blanket; then top it off with five or six more red pressboards, each 0.025 in. thick. All blankets and boards are 22 in. by 26 in. He believes a 0.915 in. high chase gives a good mold. He doesn't think the height of a chase is of as much importance as is the trueness all around.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FASTER
MORE PROFITABLE PRINTING
75,000 FOLDING CARTON BLANKS PER HOUR!
Send your production samples, let Champlain show you how to do the job — better, faster, more profitably.
NO MAKEREADY
360° RUNNING REGISTER CONTROL
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CHICAGO OFFICE: 7 W. Madison St., Chicago 2, Ill.
Rotogravure at its best
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FOR SALE

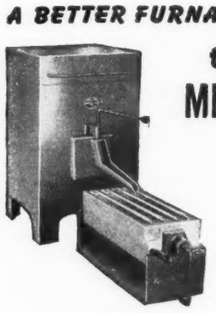
64 Page Hoe Magazine Press (16 pages in color).
40 Page Hoe Magazine Press (20 pages in color).
TWO 32 page Hoe Magazine Presses (Black and White). Will produce 10½" x 14½" untrimmed signatures.

Two Christensen Saddle Stitchers, double heads, equipped with 4 Sheridan 2B Inserter Boxes, size 5" x 8" to 12" x 16".

Sheridan Streamline Trimmer. Details on request.

Reply Box 334, Printing Equipment Engineer
1276 W. Third Street Cleveland 13, Ohio

A BETTER FURNACE . . . AT A BETTER PRICE



the NOLAN METAL REMELTER

A compact, highly efficient metal remelting furnace. Priced surprisingly low and designed to make your remelting and repigging easier at money-saving speed. Available in 650 lb. and 2000 lb. capacities. Write for Bulletin.

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1331 East Dominick St.
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Builders of BETTER Equipment for BETTER Printing

CLASSIFIED ADS ALL CLASSIFICATIONS

$.75 per line 1.9/16" wide. Minimum ad 5 lines, 25 characters per line. Cash with order.

CLOSING DATE—15th of Month preceding Date of Issue.

We will forward all mail addressed to Box Numbers. When answering Box Numbered ads, address as follows: Box Number . . . PRINTING EQUIPMENT Engineer, 1276 West 3rd Street, Cleveland 13, Ohio.

NEWSPAPER MECHANICAL SUPERINTENDENT

Executive position available in open-shop West Coast establishment. Position permanent for man between 35 and 45. Require man with complete knowledge newspaper composing room production with actual basic working knowledge of engraving, press and stereotyping. In emergencies must be able to pinch hit but in main duties will be employing and training young men, suggesting improved systems in printing and assisting in introduction of new and practical printing equipment. Write fully and in confidence. Give names of three most recent employers. Reply Box 333.

SALESMAN WANTED

Leading printing machinery manufacturer seeking experienced graphic arts salesman. Maximum commissions and salary. Car necessary. Include photo and details in first letter.

Reply Box 327 — *Printing Equipment Engineer.*

MECHANICAL SUPERINTENDENT

Two progressive medium sized midwest dailies need a man who can supervise all their mechanical departments. The right man must be experienced, hard-working and cost conscious. He must be ambitious to organize and run the best mechanical departments in the U.S. Future and salary depend on you. Write in confidence all details. Box 331, *Printing Equipment Engineer.*

FOR SALE

Rouse Band Saw, 110 A.V., A-1 condition. $350. Monotype Type Caster, 110 A.C. 30 & 36 mold. $400. Also 12, 14, 18 pt. 2T Molds, new. $90 each. 24 pt. 4U Mold, rebuilt, $60. 36 fonts mats, 18 to 36 point. $45 each. Reply P. Loesch, Erie Dispatch, Erie, Pa.

WANTED

Linotype Operators, Floormen, $17.15, 7½ hours. Two weeks vacation. $1,000 Life Insurance Policy. Steady. Arrange housing. P. Loesch, Erie Dispatch, Erie, Pa.

FOR SALE

Two - motor full automatic newspaper press drives and control panels, 220 volt, 3 phase, 60 cycle AC, complete with resistors and push button stations:

2 Cutler Hammer 40/3 HP faceplate type, equipped to parallel.

2 Cutler Hammer 40/3 HP crosshead type, equipped to parallel.

All used, serviceable, being replaced with larger drives. Immediately available.

The Eastern Color Printing Company
Waterbury 91, Conn.

FOR SALE

LSB Harris, 17½x22½ Offset Press, $5000

S-8-L Harris 28x42 Offset Press Suction Pile Feed, extension pile delivery $6500

LB Harris, 41x54 Offset Press, $14,000

GT Harris 41x54 Offset Press, 2 color $17,000

Miller 27x41 Major 4 track. Price open

Miller 25x38, 2 color. Price open

Miller Universal Saw-Trimmer (new) $790

Miller Super Heavy Duty Saw-Trimmer, Recon. $525

Router attachment, Recon. $225.00

"See Ryan Before Buyin"

E. G. RYAN & COMPANY
727 S. Dearborn Street
Chicago 5, Illinois

FOR SALE

Scott Multi Unit Octuple Press, first class condition. July delivery. Contact Dave Dryden, Journal - Tribune, Sioux City, Iowa.

★ **STAR CUT CEMENT** ★

Since 1936 — *For Mounting* — Since 1936

CUTS...STEREOTYPES...ELECTROTYPES

65c per tube-$5.50 per doz. $5.00 per doz. in two doz. lots, $4.50 per doz. in gross lots.

★ STAR CEMENT COMPANY ★
45 Malone Avenue, BELLEVILLE 9, N.J.

EQUIPMENT FOR PRINTERS

Mitering machines · Composing sticks · Slug clippers · Band saws · Lead and rule cutters · Newspaper bases, files and racks.

H. B. ROUSE & COMPANY
2214 North Wayne Ave. Chicago, Illinois

100% AUTOMATIC SLUG SAWING

Odd measure slugs sawed to any measure as ejected from linecasting machine. Fast-accurate-economical.

MOHR LINO-SAW CO.
128 N. Union St. Chicago

MOHR SAW

miller — *for America's modern pressrooms*

MILLER PRINTING MACHINERY CO., PITTSBURGH, PA.

FOR SALE

Two Hoe folders, shear cut. Model No. 1766 and one double French make folder. All in good working condition. Will sell at fair price. L. J. Gold, 5151 N. Lake Drive, Milwaukee, Wis. WOodruff 2-3875.

Use this classified ad section for Position or Help Wanted.

FOR SALE

New Tesch Automatic Saw Filer with capacitor start induction motor and 2 index plates to file 64 and 70 tooth saws, including 2 doz. files. Price $125.00. Reply Box 332.

FOR SALE: Duplex Flat Bed Press. A.c. motor, chases, $4,500.00.

WANTED: Make-up Turtles, stereotype shell cast planner. Box 408, Jackson, Miss.

Most of the *Star-Times* pages are molded at 2100 lbs. to the square inch with 190 deg. of heat. All pages except the want ads and markets are bumped by the Harry Wrasse method—that is, after molding, the blankets are removed and the mat on the form is raised against the platen at about 400 lbs. pressure for a brief interval.

In the absence of scheduled chairman John L. Blake, Vernon Spitaleri, Manager of the ANPA Mechanical Dept., presided. The first speaker was R. H. Hackett, Advertising Mgr. of the Youngstown (O.) *Vindicator*. Mr. Hackett discussed *Profitability of Running R.o.p. Color*. He stated he has never known sales results to flop in r.o.p. color advertising. He asserted that the paper carrying a large volume of r.o.p. color also carries a large volume of black-and-white advertising. In the first three months of this year the *Vindicator* has carried 2120 in. of r.o.p. color for three stores in Youngstown. The schedule for *Vindicator* color advertising is 25% for one extra color; 40% for two extra colors and 50% for three extra colors.

Dearnley Reports for AAAA

The *Report of the Joint Committee on Newspaper Printing* was presented by George B. Dearnley. Mr. Dearnley is Vice President of McCann-Erickson, Inc., New York. He stated the AAAA-ANPA Report No. 3 would be published soon. He also mentioned that there remain a number of problems with respect to handling newspaper advertising plates remain to be arbitrated. One of these is related to incorrect packing of plates which causes receipt of them in bad condition. Another problem is that of addressing plates to the wrong department in the newspaper which causes wrong insertion dates. He advocated inspection of printing materials before shipment. A section is recommended to be added to the report for materials to be used for suitable shipping containers. Another problem is the proper identification of advertising proofs and plates. Report No. 3 will cover the handling of materials for reinsertion of advertisements. Some sort of plan for checking and inspecting materials when received by newspapers should be set up, thus putting the newspaper plant in position to notify the advertising agency of imperfections in advertisements and get them corrected before insertion date. In some cases, unpacking damage causes bad materials to be sent to the composing room. A list of simple tools for inspection of materials when received will be recommended as will a simple routine system for recording receipt of materials.

R. W. Tranter, Mechanical Supt. of the Boston *Herald-Traveler*, said he was pinch-hitting for Charles Kirk, Stereotype Supt. of the Detroit *News*, who was originally scheduled to speak. Mr. Tranter spoke for the ANPA section of the Joint Committee. In a supplement to Report No. 3 discussed by Mr. Dearnley, samples of defective materials will be shown each suitably described by a caption. The demonstration will contain illustrations molded by stereotyping and printed under newspaper conditions. Other information will consist of recommended halftone screen sizes for newspaper reproduction. Steps of removal from the original in reproducing an original will be demonstrated. Mr. Tranter remarked that much advertising material is five removals from the original copy. Selection for duplicating materials will be listed.

Color Comic Advertising Reproduction

In speaking to the production and mechanical executives as a member of the Joint Committee, Stanley Meyers, Asst. Mechanical Supt. of the Philadelphia *Bulletin*, stated that the Joint Committee is now occupied with the improvement of color comic advertising printing. This $20 million field has made it economically possible to increase the size and improve the quality of comic sections, adding to the readers' enjoyment and to the respective circulations of newspapers.

Among the problems associated with color comic advertising as mentioned by the agency members of the committee are poor register, poor makeready, variations in shades of the basic ink colors, variations in amount of ink carried on the pages, and wide variations in the off-white shades of newsprint, total disregard in some cases, of progressive proofs.

On the other hand, Mr. Meyer told about the newspaper men on the committee having some justifiable complaints. Chief objection was the many variations in the shades of red, yellow and blue ink used on the progressive proofs supplied. One member of the committee pointed out that you would need a separate ink fountain on the press for each page if you attempted to match the "progs." Another criticism was that many "progs" were pulled on better grades of newsprint on up to machine finish paper, making it impossible to match the printing on newspaper presses printing on news stock. Other newspaper men's complaints included poor quality stereotype mats furnished, defects in engravings and patterns, changes in plates which did not show in the "progs," late arrival of "progs" and in some cases, failure to send "progs" at all.

Mr. Meyers asked the cooperation of everybody concerned by way of suggestions submitted in writing to the committee.

R. E. O'Dowd, Advertising Manager of the Cincinnati *Enquirer*, presented a resume of the advertising production schedule in effect among the Cincinnati newspapers with respect to local advertisers.

The Intaglio Way

Len Pinover, Vice President of Intaglio Service Corp., New York, presented a movie entitled *The Intaglio Way*. The picture is descriptive of the methods used in making and printing from gravure plates and/or cylinders. Running comment by Mr. Pinover lent great interest to the presentation.

ADVERTISERS' INDEX FOR JULY 1949

P. E. E. Representatives:

WILLIAM L. OSBORN, Eastern Manager, 1728 Grand Central Terminal, New York 17, N. Y. Phone MUrray Hill 6-5980.

EUGENE A. POWERS, Midwest Manager, 612 N. Michigan Ave., Chicago 11, Ill. Phone: SUperior 7-2444

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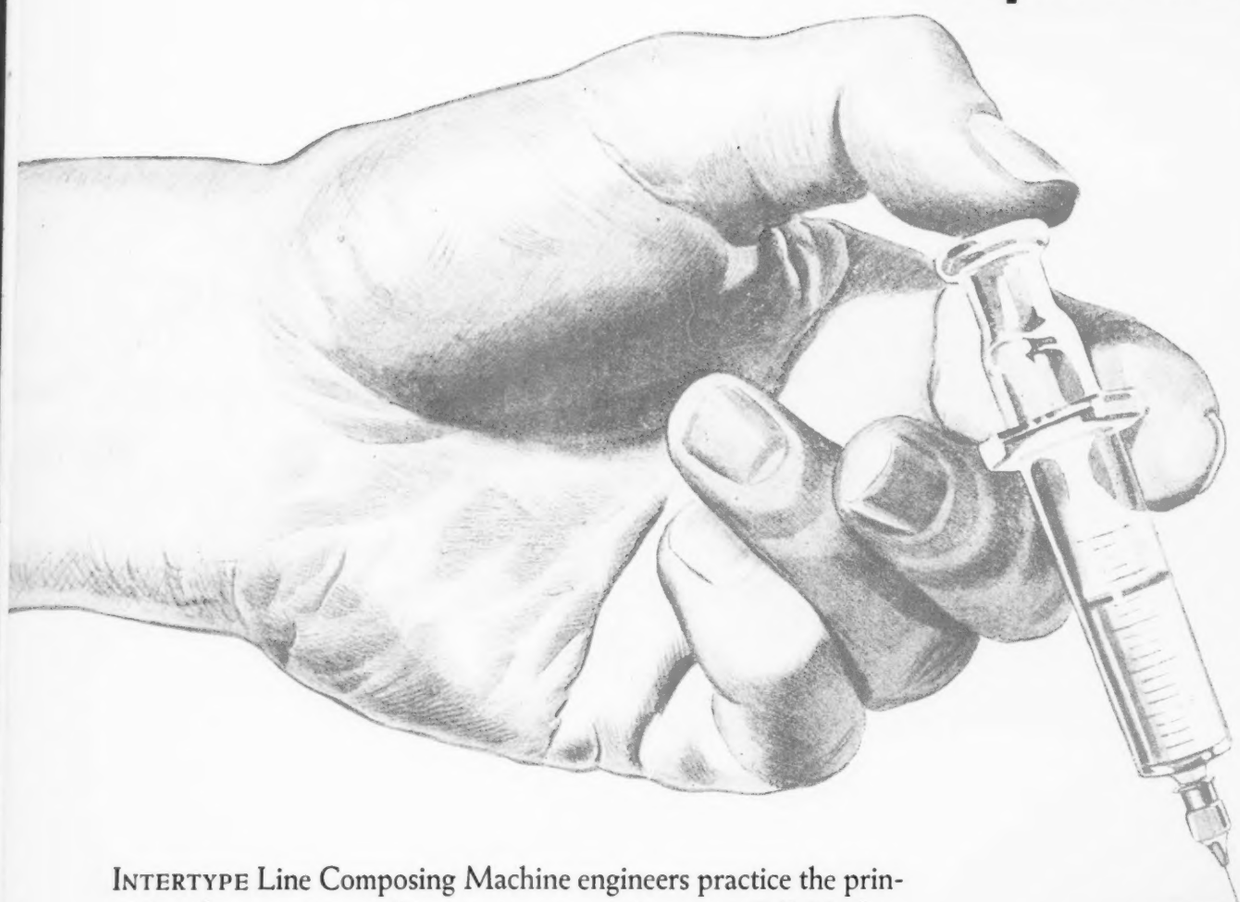

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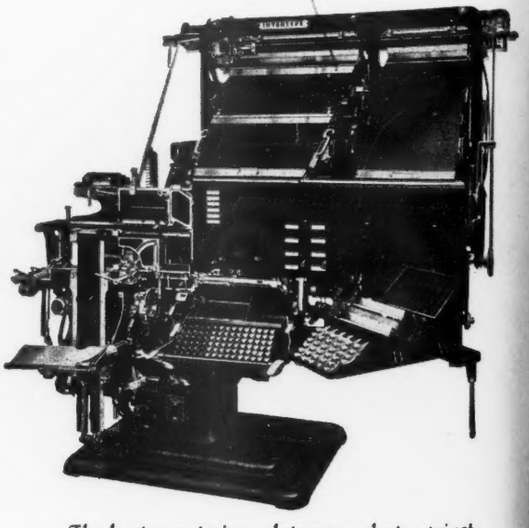

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